TOPIC
Fake News on Social Media

BACKGROUND/RESEARCH SUMMARY

During the year 2016, the American Presidential election between Donald J Trump and Hilary Clinton, helped identify a growing problem on social media. The spread of misinformation, lies and dubious claims shared online, became known as 'Fake News'. This catchy phrase was developed by at the time, President Trump, who raged a metaphorical war with the US news media. This idea of fake news really spread widely on social media as the post between real news and fake news looked so identical in syntax, that it was almost impossible to distinguish the differences.

The extremely heightened popularity and usage of social media is the main vehicle that fuels the virality of misinformation and the difficulty to identify it. According to the website, Science.org, "A new study shows that people are the prime culprits when it comes to the propagation of misinformation through social networks. And they're good at it, too: Tweets containing *falsehoods reached 1500 people on Twitter six times faster than truthful tweets*, the research reveals." Whether they believe it as truth or are manipulating the ignorant and vulnerable masses intentionally, regular people are spreading this misinformation, but identifying who is creating fake news to sow discourse is the true villain against a civil society.

It is unethical to spread misinformation on social media as it has a negative ripple effect on society. Because of the rapidly and ever-evolving dynamics behind how information is shared and misinformation spread, just the basic lesson planning step of choosing the best and most reliable resources has become a heightened struggle. On top of this, like many other things, it has fallen to the teacher to be tasked with equipping students with digital literacy and critical thinking to distinguish between fake and real news. For example, it can be deemed biased by getting all information from one source, so it is important to have a broad number of sources to appropriately see an issue from all sides and teach students the ethical and empathic approach to the situation. To keep in step with this emerging and urgent need, it is essential for educators to apply this critical thinking and analysis that we are looking to teach, in order to actively shift away from outdated pedagogical practices and crumbling social norms, towards a truer democracy, independent thinking, and collective progress.

ETHICAL CONCERNS + JUSTIFICATIONS

According to the New York Times, reachers at Oxford University found that:

"the number of countries with political disinformation campaigns more than doubled to 70 in the last two years, with evidence of at least one political party or government entity in each of those countries engaging in social media manipulation."

People who are behind this fake news are often there for monetary reasons and not truly there to spread misinformation. Spreading misinformation is a big business, according to the Guardian, it is hard to know the exact scale of the for-profit misinformation industry, researchers say, since it functions as part of an underground economy and comes in various forms. In addition to content mills and ad revenue schemes, there are private firms across the globe that are hired to create fake engagement or promote political propaganda. In 2021 alone, Facebook said it removed 52 coordinated influence networks across 32 countries that attempted to direct or corrupt the public debate for strategic goals, according to a company report on inauthentic behavior." For many countries and smaller platforms misformation can be used to help increase the traffic to their site which can lead to an increased number of users.

In a 2019 post titled, *Dealing with propaganda, misinformation and fake news,* the Council of Europe, the continent's leading human rights organization, emphasized:

"Propaganda, misinformation and fake news have the potential to polarize public opinion, to promote violent extremism and hate speech and, ultimately, to undermine democracies and reduce trust in the democratic processes [...] School is the one place where it is absolutely crucial to train future citizens to understand, to criticise and to create information. It is in schools that the digital citizen must begin and maintain constant critical thinking in order to attain meaningful participation in his or her community."

The rationale is based on the following points:
- information and communication technology are central to their lives, so young people are particularly vulnerable to propaganda, misinformation and fake news.
- they spend most of their time interacting with digital media, online, communicating/researching/searching/socializing via the internet; information circulated online has therefore become a main source of their news and how they perceive the world
- parents/guardians often lack technical competence to keep up with their children's online activity or proactively help them navigate online risks and misinformation
- **Therefore, schools have a duty to provide young people with the critical and information skills which they cannot access at home.**

CODING: Design, Complexity, + Implementation

The following Scratch code sample can be used as a template or modified for use in both middle school or entry level programming courses in high school.

Objectives can include:
- (1) showing understanding of social interactions where the spread of misinformation is at play
  or
- (2)to evoke empathy from the user for being more mindful of this dangerous risk of modern society.

The sample conditionals program and practice showcased in the python link seems unrelated but can be customized by students to create a simple choose-your-own-adventure type activity to:
- hit the same objectives as the Scratch program
  OR
- be scaffolded up for complexity to
  - (1)simulate how tough it can be to identify a truth vs. falsehood
  - (2) showcase tactics often used to make it difficult to tell a truth from a falsehood and
  - (3)the ripple effect discussed earlier of how falling for various social media "fake news" (political or not) can lead to damaging effects in other areas of society or one's personal life

Spread of Fake News (scratch)

Conditionals Sample (python)

REFERENCES

1. Alba, D., & Satariano, A. (2019, September 26). *At Least 70 Countries Have Had Disinformation Campaigns, Study Finds*. The New York Times.

   https://www.nytimes.com/2019/09/26/technology/government-disinformation-cyber-troops.html
2. *Just a moment. . .* (n.d.).
   https://www.science.org/doi/10.1126/science.aao2998?cookieSet=1
3. Robins-Early, N. (2022, February 22). *Disinformation for profit: scammers cash in on conspiracy theories*. The Guardian.
   https://www.theguardian.com/media/2022/feb/20/facebook-disinformation-ottawa-social-media
4. Council of Europe. (n.d.). *Dealing with propaganda, misinformation and fake news*. Democratic Schools for All.
   https://www.coe.int/en/web/campaign-free-to-speak-safe-to-learn/dealing-with-propaganda-misinformation-and-fake-news