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# Educating Youths on Fake News and Online Disinformation: A Comprehensive Approach

Vlasis Manolias<sup>1</sup>

<sup>1</sup> Metropolitan College, [manolias@akmi-international.com](mailto:manolias@akmi-international.com)

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## Abstract

This study aimed to develop an educational course targeting youths to enhance their abilities in identifying and combatting fake news and online disinformation. The research question focused on devising effective strategies to educate youths on recognizing and addressing misinformation. Primary sources and European Union documents were utilized in a literature review, emphasizing the societal and democratic significance of mitigating the spread of fake news. The resultant online course spans two hours and covers fundamental topics such as the nature of fake news, its societal impact, and strategies for detection and mitigation. Learners will engage with both local and global sources to critically evaluate examples of misinformation. Additionally, a six-hour offline course offers practical experience in crafting awareness materials and encourages participants to disseminate their knowledge within their communities. Through a blend of theoretical instruction, practical exercises, and interactive elements, this course aims to furnish learners with a comprehensive understanding of fake news and equip them with the skills to combat its proliferation. By fostering critical thinking and active participation, the course seeks to empower youths to mitigate the influence of fake news in educational settings and beyond, contributing to a safer, more equitable, and democratic society.

**Keywords:** youth education ; Fake News ; Disinformation; Critical Thinking; Media Literacy

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## 1. INTRODUCTION

In the recent past, the emergence of social media sparked hope for its potential to democratize access to economic and political opportunities, foster collective action, and enable diverse forms of self-expression. This led to extensive discourse and scholarly exploration, merging established knowledge in mass media, economics, and social movements with the capabilities of this new communication platform (Guess & Lyons 2020). However, subsequent political upheavals and elections have shifted perceptions, with Facebook and Twitter being more commonly associated with the proliferation of "fake news" and propaganda, rather than as tools for positive societal change (Guess & Lyons, 2020).

## 2. COURSE DESCRIPTION

### 2.1. WHAT IS FAKE NEWS?

Although numerous definitions of fake news have been proposed, a universally accepted definition remains elusive. Some definitions adopt a narrow scope, characterizing fake news as deliberately false or misleading information disseminated through various media channels, including broadcast and social media platforms (Kavanagh & Rich, 2018; Zimdars & McLeod, 2020). Conversely, broader definitions encompass a spectrum of misinformation and disinformation. Misinformation pertains to false information devoid of malicious intent, while disinformation entails intentionally deceptive content designed to manipulate, harm, or misguide individuals, organizations, or nations. Additionally, malinformation refers to distorted information based on truth, often exaggerated to mislead and potentially cause harm (Frankl, n.d.).

Misinformation, unlike rumors or conspiracy theories, alters widely accepted and verifiable facts. While falsehoods pose epistemological dilemmas, particularly concerning experiences mediated beyond direct perception, empirical studies typically focus on claims directly verifiable or endorsed by expert consensus, despite ongoing controversies.

In contrast to misinformation, disinformation involves the deliberate dissemination of false information with the intention to deceive. This encompasses organized endeavors, particularly by political entities, to disseminate misleading content, commonly referred to as "fake news." Furthermore, propaganda, defined as information aimed at garnering support for one political faction over another, encompasses the breadth of deceptive communication strategies.

#### 2.1.1. CONSEQUENCES OF MISINFORMATION AND FAKE NEWS

The rapid proliferation of fake news and disinformation online yields profound and far-reaching consequences. Primarily, it undermines trust in media institutions, fostering skepticism toward established sources of public information and democratic processes such as elections (Baptista & Gradim, 2022). This widespread dissemination of false information not only engenders confusion and discord among the populace but also erodes the foundation of democratic systems, diminishing confidence in recognized institutions.

Moreover, specific societal groups, such as Muslims, migrants, and Roma, become targets of extremist ideologies, exacerbating social tensions and inciting violent acts (Media Diversity Institute, n.d.; Szakács & Bognár, 2021). Beyond societal discord, these campaigns pose threats to national security and overall societal well-being, providing fertile ground for potential criminal activities and challenging efforts to maintain public safety (Olteanu et al., 2018).

The digital realm, in its unbridled dissemination of false narratives, facilitates the propagation of harmful conspiracy theories and hate speech (Siegel, 2020). Individuals subjected to online targeting, particularly on forums and social media platforms, often face attacks rooted in factors such as ethnicity, physical attributes, sexual orientation, socioeconomic status, or gender.

In the realm of health, misinformation can have detrimental effects, influencing decision-making regarding health-related issues such as anti-vaccination or treatment of illnesses through non-scientific methods and unaccredited information sources, ultimately impacting public health outcomes (Guess & Lyons, 2020; Swire-

Thompson & Lazer, 2020). This misinformation about health issues, including the spread of false information regarding Covid-19, also fuels tendencies toward racism against vulnerable groups such as Muslims (Birmingham City University, n.d.).

Moreover, this misinformation extends its impact to academia, compromising research quality and potentially impairing academic performance (Plaza, 2023). Plaza's study revealed that exposure to fake news significantly influenced students' political perspectives, often leading to polarization and the adoption of misinformed beliefs. Additionally, fake news can disrupt critical thinking and propagate inaccurate information within academic circles, while demographic disparities, particularly age, render younger students more susceptible to its effects due to their increased reliance on digital media channels.

Furthermore, misinformation contributes to individual radicalization and manipulates public opinion, influencing perceptions and decisions to achieve ideological, social, religious, or economic goals. Ultimately, the prevalence of false information hinders individuals' ability to discern and access authentic and accurate information, complicating the pursuit of truth.

### **2.1.2. THE LINK BETWEEN FAKE NEWS AND RADICALIZATION**

The influence of misinformation, particularly when employing divisive rhetoric and evoking strong emotional responses, profoundly shapes individuals' reactions, notably in the propagation of violent extremism driven by ideological, social, religious, or economic objectives.

Moreover, individuals with specific vulnerabilities are particularly susceptible to radicalization due to the dissemination of fake news (Roberts-Ingleson & McCann, 2023). These vulnerabilities include feelings of self-uncertainty, limited cognitive flexibility characterized by rigid or dichotomous thinking patterns, harboring perceived or actual grievances, and experiencing social exclusion.

Additionally, the presence of social homogeneity within online spaces, known as "echo chambers," exacerbates susceptibility to radicalization. These echo chambers, by reinforcing similar beliefs and ideologies, particularly on social media platforms, create an environment that amplifies the impact of misinformation and divisive narratives, further intensifying susceptibility to radicalization among certain individuals.

Examples of real-world incidents illustrate the consequences of radicalization facilitated by online misinformation. In both Europe and the USA, a prevailing narrative of perceived threats to "national identities" has been linked to far-right domestic terrorism, anti-migration sentiments, and the dissemination of hate speech and propaganda (Siegel, 2020; Roberts-Ingleson & McCann, 2023). Studies investigating the relationship between online hate speech and physical violence have shown that areas with increased social media usage during periods of heightened anti-refugee sentiments online experience a disproportionate rise in anti-refugee hate crimes (Muller & Schwarz, 2017; 2019).

Furthermore, instances of propaganda and fake news targeting ethnic or religious minorities have been documented historically, such as radio propaganda fostering anti-Semitic violence in Nazi Germany and hate radio during the Rwandan genocide (Adena et al., 2015; DellaVigna et al., 2014; Yanagizawa-Drott, 2014). Numerous arguments posit a direct correlation between online hate speech and hate crimes, with perpetrators often attributing their actions to the influence of online communities (Siegel, 2020).

Moreover, violent incidents spurred by social media are not confined to Europe and the USA but also occur in regions like Asia, the Arab world, and Sub-Saharan Africa. For example, the use of social media by ISIS to propagate propaganda has incited societal turbulence and violence, while disinformation campaigns against minorities in South Asia have fueled tensions and attacks against vulnerable communities (Alava et al., 2017; EFSAS, 2021). Despite these challenges, youth activism against propaganda is also facilitated and promoted through social media platforms (Alava et al., 2017).

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### 2.1.3. HOW TO DEVELOP CRITICAL THINKING AND MEDIA LITERACY

The regulation of online misinformation poses significant challenges but is essential for upholding democratic principles and protecting human rights. Various methods and approaches exist to combat misinformation, with initiatives undertaken by societies, governments, social media platforms, and individuals, including efforts by the European Commission (European Commission, 2017).

A fundamental approach involves empowering internet users to modify their online behaviors to reduce susceptibility to false beliefs stemming from deceptive assertions. This includes developing critical thinking and media literacy skills to enable users to assess information critically (Frasser Hall Library, n.d.; Babii, 2020; University of Exeter, n.d.). Evaluating the underlying agenda of news stories, scrutinizing emotional narratives, and interrupting the reflex to share outrage-inducing posts are essential steps in mitigating the spread of misinformation (Babii, 2020).

Fact-checking before sharing social media posts, regardless of the source's perceived credibility, is crucial to promote truthfulness and combat the dissemination of false information. Scrutinizing the sources of information, especially those relying on anonymous or single sources, helps discern the credibility of narratives presented (Brown, 2021).

However, challenges persist, including algorithmic regulations and epistemic networks perpetuating the dissemination of fake news or dubious quality sources, as well as individuals' overconfidence and bias towards information that aligns with their viewpoints (Brown, 2021; Pronin et al., 2002).

Social media companies can contribute by modifying their platforms to limit the exposure of misleading content and advocating for governmental implementation of laws penalizing individuals involved in disseminating misinformation (Brown, 2021). Ultimately, a multi-faceted approach involving collaboration between stakeholders is necessary to effectively combat the spread of fake news and misinformation online.

## 3. COURSE RESULTS

In the pursuit of combating misinformation and fake news, fostering critical thinking and media literacy stands pivotal in our democratic society. The regulation of misinformation online signifies a vital stride towards safeguarding the tenets of democratic citizenship and collaborative efforts across societies, governments, and digital platforms become imperative to shield people against falsehoods. Developing critical skills remains paramount, equipping individuals with the ability to discern deceptive information and critically assess sources. However, challenges persist as emotional narratives often sway opinions, necessitating cautious evaluation and fact-checking to counter the manipulation tactics employed by propagandists. While hurdles exist within our epistemic network and the digital realm, fortifying critical thinking, media literacy, and advocating for regulatory measures form the bedrock of our collective endeavor to combat fake news and uphold the essence of democratic citizenship and human rights.

### COURSE ACTIVITIES (ONLINE AND OFFLINE)

#### 3.1. ONLINE ACTIVITY 1: FAKE NEWS: SPOT THEM!

##### 3.1.1. LEARNING OBJECTIVES

The learning objectives of the activity will be for the learners to:

1. Develop the skill to distinguish between credible and misleading information through quiz, focusing on identifying characteristics of fake news articles.
  2. Enhance critical thinking abilities by locating reputable websites within their countries that validate instances of fake news and presenting one example to fellow students, demonstrating adeptness in source evaluation.
  3. Cultivate the capacity to assess the credibility of online sources by identifying markers of bias, anonymity, or corroborative evidence in their pursuit to verify fake news claims.
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4. Develop proficient communication and presentation skills through the presentation of a selected fake news to their fellow students.

### 3.1.2. LEARNING OUTCOMES

After the completion of the online activity, learners will be able to:

- Differentiate between credible and misleading information
- Use trustworthy websites in their respective countries that debunk or provide evidence of fake news.
- To evaluate and analyze news sources critically through the assessment of the reliability and credibility of various online sources identifying factors such as biased information, anonymous sources, or lack of corroborating evidence to present fake news in effective way

### 3.1.3. ACTIVITY DESCRIPTION

The introductory part of the online activity will be through the Slido and participants will need to answer to the following question:

“What the fake news are?”

After the course, participants will go on with the following steps of the online activity:

The first part of activity will be for participants to answer the quiz about specific fake news and they will read the info which debunk each fake news, provided by the Guardian: <https://www.theguardian.com/guardian-foundation/2022/apr/14/fake-or-real-headlines-quiz>.

After the completion of the quiz the participants will share their results and they will take part in an open facilitated discussion answering the following questions:

1. Which headline did impress you more and why?
2. Can you think of any other example of news which was proven fake?

In the second part of the activity, students will check the following fact-checking websites:

Check the following fact checking websites:

- Snopes.com [<https://www.snopes.com/> ]
- The Poynter Institute [<https://www.poynter.org/> ]
- Politifact.com [<https://www.politifact.com/> ]
- Factchecker.org [<https://www.factcheck.org/>]
- Hoax-Slayer [<https://mediabiasfactcheck.com/hoax-slayer/> ]
- The Internet Archive Wayback Machine [<https://web.archive.org/>]
- <https://www.channel4.com/news/factcheck>
- <https://fullfact.org/facts/>

Source: <https://www.uvic.ca/retirees/assets/docs/fake-news-ppt-presentation-updated.pdf>, p.24

Participants will be divided into groups and they will check one of the aforementioned websites. Then they can choose one of the provided debunked fake news and mention it to their fellow students.

Afterwards, the participants will be divided into national teams and they will search for national-level websites for tackling fake news. An example from Greek context is provided below:

Greek website about fake news: <https://www.ellinikahoaxes.gr/about-us/>

This website is member of the following worldwide networks: International Fact-Checking Network (IFCN): <https://ifncodeofprinciples.poynter.org/signatories>; European Observatory against Disinformation: <https://www.disinfobservatory.org/the-observatory/>

Participants as a sub-group will search for websites within their country and they will write them down in a Google Doc which will be shared to them developing a list of trustworthy websites which reveal the truth for fake news spread in their countries.

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## **3.2. OFFLINE ACTIVITY : THE EFFECT OF FAKE NEWS**

### **3.2.1. LEARNING OBJECTIVES**

The learning objectives of the offline activity:

- Participants will actively participate in forum discussion
- Participants will learn through video attendance about how the fake news works and affects us.
- Participants will learn how to discern fake news by researching credible sources and applying critical reflection techniques, fostering an understanding of identifying and evaluating misleading information.
- Participants will learn how to find and develop diverse media (videos, stories, music, etc.) aimed at combating hate speech and spreading awareness, fostering a proactive approach towards tackling fake news.
- Participants will learn how to collaborate and present content about fake news.

### **3.2.2. LEARNING OUTCOMES**

After the completion of the activities, the learning outcomes of the participants will be:

- Consistent participation and engagement in forum discussions and activities, showcasing comprehension of the content covered in videos.
- Adeptness in recognizing fake news by employing critical reflection strategies, substantiating the identification with credible sources, and presenting findings coherently.
- Development of multimedia material aimed at challenging hate speech, presenting explanatory notes that contextualize the created content for effective dissemination.
- Effective teamwork for creating and delivering presentations that effectively communicate the chosen activity's content, fostering collaboration and presentation skills.

### **3.2.3. ACTIVITY DESCRIPTION**

The offline activity will be divided into 3 parts:

1st part: Video attendance and answer to questions in the forum of the platform or in a Google jamboard (½ hour)

2nd part: Video attendance and answer to questions in the forum of the platform or in a Google jamboard (½ hour)

As for the 3rd part, participants will be grouped into subgroups of max. 5 people each and they will choose one of the 2 following activities:

3a. "Recognize fake news" in which they will need to find a source with fake news (The websites for tackling and debunking fake news can provide the relevant information). Later, they will need to write one case of fake news they found.

Then participants will answer to the following question:

- How did you recognize that fake news is fake?
- Follow the critical reflection part of the course content to find some tips!

The final step is to create a short presentation through Canva, Google slides, Powerpoint or any other tool and share it with fellow students.

The duration of this activity will be 5 hours.

The alternative sub-activity as the 3rd part is:

3b. "Stop fake news!" in which participants will need to develop one of the following options to produce or find material about tackling fake news:

-Video or photo creation. Videos or images which make fun of or raise awareness on phobias about disinformation (Islamophobia, homophobia, etc.).

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- Storytelling. Social media or blog posts that tell a personal story of xenophobia or relying on stereotypes.
- Music/Movies. Share songs or movies to challenge hate speech against vulnerable groups of people (immigrants, ethnic or religious groups, people with disabilities etc.).

Participants will need to provide their fellow students with some explanatory notes about the material they will develop and share it with them.

The duration of this activity will be 5 hours.

### 3. REFLECTION AND FUTURE STEPS

In the Reflection and Future Steps section, participants will engage in a process of introspection and prospective planning, aimed at consolidating their comprehension of fake news and delineating actionable pathways for themselves and their communities.

They will be prompted to critically assess their pre-existing knowledge of fake news phenomena, identifying instances encountered prior to and during the course. Leveraging the critical thinking skills and media literacy competencies acquired, participants will scrutinize the mechanisms underlying the detection of fake news, reflecting on the discernment of credible sources, appraisal of information for biases and inaccuracies, and utilization of fact-checking methodologies to validate news authenticity.

Furthermore, participants will deliberate on proactive measures for mitigating fake news dissemination, contemplating individual practices and collective endeavors within community contexts. Such considerations may encompass the cultivation of media literacy education, cultivation of robust fact-checking habits, and cultivation of responsible information dissemination practices.

Moreover, participants will explore avenues for advocating media literacy, fostering constructive dialogues, and supporting others in developing critical thinking capacities. By engaging in these reflective exercises, participants will fortify their comprehension of fake news dynamics and chart pragmatic courses of action to foster a more informed and resilient societal fabric, thus contributing to the mitigation of misinformation propagation.

### ACKNOWLEDGEMENTS

This work has been developed with the financial support of the project VirtuEU – Virtual Exchanges in Higher Education and Youth (ERASMUS-EDU-2022-VIRT-EXCH-IPA, Proposal number 101111907).

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