Critical Digital Literacy



Introduction

Welcome to the module on Critical Digital Literacy. In today's digital age, information is available at our fingertips, but not all information is reliable or accurate. With the widespread use of social media, it has become easier than ever to spread false information and fake news, which can have harmful consequences for individuals and society as a whole. Therefore, it is essential to develop critical digital literacy skills to evaluate the information we encounter and make informed decisions about what we share and believe. Critical digital literacy is the ability to produce and consume digital content critically.

In this module, we will explore the importance of critical digital literacy in today's world and how it can help us stop the spread of fake news and misinformation. We will discuss the characteristics of reliable sources and how to identify and evaluate them. We will also explore the impact of fake news on individuals and society and the ethical responsibilities of digital citizens.

Through various activities and case studies, we will learn practical ways to fact-check information and identify misinformation/disinformation and biased opinions that are presented online as factual information. We will also explore how to navigate the complex world of social media and avoid falling prey to clickbait headlines and sensationalized content.

By the end of this module, you will have gained a solid understanding of critical digital literacy and developed the skills necessary to evaluate and share information responsibly. You will be better equipped to navigate the digital world with confidence and make informed decisions about the information you encounter. Let's get started on our journey towards becoming critical digital citizens who can interpret and make informed judgements as users of information and media, as well as become skilful creators and producers of information and media messages in their own right!



Disclaimer

This work is licensed under a creative commons Attribution 4.0 International License. You can modify and build upon this document non-commercially, as long as you give credit to the original authors and license your new creation under identical terms.

Prepared by: Prabhav Jain

Edited by: Akanksha Ahluwalia

Design and layout by: Yuvasree Mohan

Published and distributed by: Digital Empowerment Foundation

Year of Publication: 2023



Training Methodology



Explanation

Short explanations to introduce the benefits of a service



Make it relevant

Use personal interests & examples that pertain to our contemporary scenario to keep trainees engaged.



Interact with trainees

Encourage two-way communication between the trainees and their trainer for more contextual & one-to-one learning.



Activity

Practical exercises using laptops, phones, and knowledge-products



Encourage action

Focus on getting trainees onto the laptop/phone to practice.



Easy to digest

The content is divided into byte-sized learning material to encourage conducting training in shorter durations.



Discussion

To encourage trainees to consider the relevance of the content in their daily lives



Appreciate trainees

Reward the trainees with regular positive encouragement.



Recap

To reinforce lessons of each module



Keep it simple

Use short and non-technical explanations.



Start with basics

Though the trainees maybe familiar with the functionality of laptops, smartphones, the internet & their uses, we wish to cover the gaps that exist in their knowledge of the digital world.

Learning Outcome

This module will introduce the learner to how to use various digital channels for facilitating access to citizen services.

Duration

16 Hours

Demonstration

Explaining the content by providing hands-on training

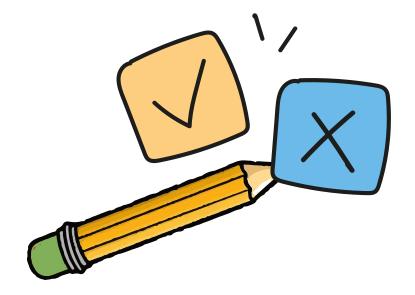
Resources Required

Laptop, smartphone, internet connection, handouts of the training content, fevicol, sketch pens, pens, whiteboard, bold markers and a pair of scissors

Contents

Pre-Assessment	01
Unit 1: Introduction to online safety	02
Unit 2: Fake News	15
Unit 3: Using Social Media	30
Unit 4: Logical Fallacies	32
Unit 5: Cognitive Biasness	35
Unit 6: Conclusion	37
Post Assessment	40





Pre-Assessment

Ask the following questions from trainees in order to know more about them.

- Do you face any challenges in accessing correct and reliable news? Yes No
- Do you think online portals and social media have influenced your decision making while deciding what is wrong or what is right? Yes
 No
- Do you think mainstream media nowadays telecast biased news and facts? Yes No
- Do you think forwarding or sharing any post on social media without verification can lead to the spreading of wrong information? Yes

 No
- Do you think you have shared information you consumed online in your network without fact-checking to verify if it is correct or not? Yes No

Unit 1

Introduction to Online Safety

Activity 1

Notes to trainer: With the below activity set context with the participants that, with the technology change, we got so many new and quick ways to communicate but on the other hand, with access, a lot of digital threats have also surfaced online, this includes fake information, data theft and spreading of misinformation.

Tell participants, we need to be digitally literate and most importantly we need to be made critically digital literate decisions.

Notes to trainer: Start with the activity of showing flashcards and telling the participants about the objects used in the past and are being used in the present.

Show them the flash cards

Notes to trainer: Show red coloured flashcards. Tell participants about things that are new now.





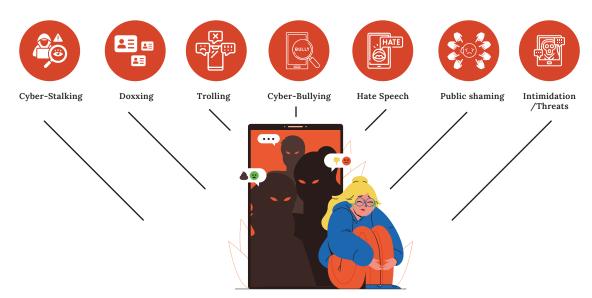






Notes to trainer: Explain the participants:

Internet safety, or online safety, is the knowledge of maximizing the user's safety against security risks to private information and property associated with using the Internet, and the self-protection from computer crime in general.



Online Harassment.

Online harassment can take many forms and can occur across various digital platforms. Here are a few examples:

Cyberbullying: This involves the use of online platforms to intimidate, insult, or threaten an individual. It can include sending hateful messages, spreading rumours, or sharing embarrassing or private information to cause emotional distress.

Trolling: Trolls deliberately provoke and antagonize others online. They may engage in offensive or inflammatory behaviour, such as making derogatory comments, posting offensive content, or instigating arguments, to provoke an emotional reaction.

Doxxing: This refers to the act of publicly revealing and sharing someone's private information, such as their home address, phone number, or workplace, without their consent. It can expose individuals to real-life harassment, stalking, or identity theft.

Online stalking: Stalkers may obsessively monitor someone's online presence, tracking their activities, personal information, and whereabouts. They may send unwanted messages, make unwelcome advances, or even make threats.

Harassment based on race, gender, or other protected characteristics: Individuals may be targeted with online abuse, hate speech, or discrimination due to their race, ethnicity, gender, sexual orientation, religion, or other protected characteristics. Such harassment can range from derogatory comments to threats of physical harm.

Impersonation and identity theft: Online harassers may create fake accounts or impersonate others to spread false information, defame someone's character, or damage their reputation. They may also steal someone's identity to engage in fraudulent activities.

Online Safety Play Cards

Notes to trainer: Mention to participants:

"Using online and digital resources do have some issues, but we should not discourage ourselves in using them. Instead, we shall learn to use them efficiently and with safety".

Notes to trainer: Perform the activity as given below.

Materials needed:

• Whiteboard or flipchart • Marker pens • Index cards or slips of paper.

Instructions:

Divide the students into 4 small groups.

Explain to the students that they will be playing a game called "Safe Online Journey" to learn about ways to protect themselves from online harassment.

Draw a simple representation of a road with 4 stops along the way on the whiteboard/flipchart.

Use the cards containing different scenarios related to online harassment on separate index cards or slips of paper. The scenarios can be:

Someone sends you a threatening message on a social media platform.

You receive a friend request from someone you don't know. You come across a website that looks suspicious and asks for personal information.

A classmate shares an embarrassing photo of you without permission.

Shuffle the scenario cards and place them face down.

Explain the rules: Each group will take turns drawing a scenario card and discussing how they would respond to the situation presented. They will then collectively come up with the best course of action to stay safe from online harassment.

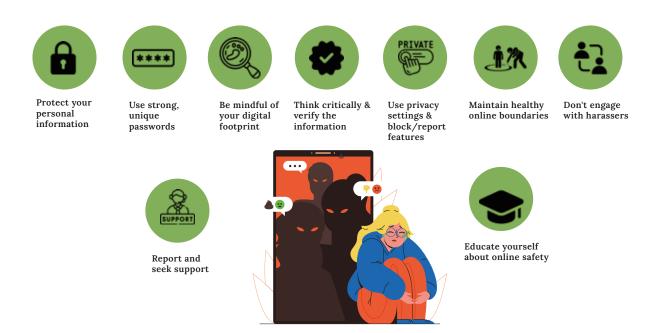
Start the game by having the first group pick a scenario card and read it aloud. This way all groups shall have one scenario each. Give them a few minutes to discuss their response within the group.

After the allotted time, have the groups share their response with the class. Encourage a discussion where other groups can contribute their thoughts, suggestions, or alternative solutions.

As a facilitator, provide guidance and reinforce the importance of staying safe online while summarizing the key points discussed after each scenario.

Conclude the game by summarizing the main takeaways and emphasizing the importance of implementing these safety measures in real-life situations. You can explain to them the below-mentioned examples.

Notes to trainer: Explain the participants:



Protect your personal information: Be cautious about the information you share online. Avoid disclosing sensitive details such as your full name, address, phone number, or specific workplace on public platforms. Review and update your privacy settings on social media to control who can access your personal information.

Use strong, **unique passwords**: Create strong and unique passwords for all your online accounts. Avoid using easily guessable information like your birthdate or common words. Consider using a password manager to securely store and generate strong passwords.

Be mindful of your digital footprint: Think twice before posting anything online, as it can have long-lasting consequences. Avoid sharing compromising photos, and personal details, or engaging in inflammatory discussions that could attract unwanted attention or harassment.

Think critically and verify the information: Don't trust everything you encounter online. Before accepting information as true, verify it through reputable sources. Be cautious of engaging with suspicious or unverified accounts, especially if they try to provoke or harass you.

Use privacy settings and block/report features: Familiarize yourself with the privacy settings and reporting features of the platforms you use. Adjust your settings to control who can interact with you and block or report users who engage in harassment or abusive behaviour.

Maintain healthy online boundaries: Set clear boundaries for yourself and adhere to them. Don't hesitate to block or unfriend individuals who engage in harassment or make you feel uncomfortable. It's essential to prioritize your well-being and safety.

Don't engage with harassers: Responding to harassers often fuels their behaviour and encourages further harassment. Instead, ignore or block them. Save any evidence of harassment, such as screenshots or messages, which can be useful if you need to report the incident.

Report and seek support: If you experience online harassment, report it to the platform's support team or through their reporting mechanisms. Reach out to trusted friends, family, or support organizations who can provide guidance and emotional support during difficult times.

Educate yourself about online safety: Stay informed about the latest online threats, scams, and harassment tactics. Educate yourself on best practices for online safety and seek out resources that can help you understand and address online harassment effectively.

OD.

Notes to trainer: Narrate the story of Ratna, related to Online dating, to the participants.

Here's a small story for you

There lived a young woman named Ratna. After several unsuccessful attempts at finding love in the offline world, Ratna finally decided to venture into the orbit of online dating. She knew that the digital landscape held vast possibilities, but she also understood the importance of staying safe while embarking on this new journey.

Ratna had heard stories of people falling victim to scams, deceit, and even danger when interacting with strangers online. With these cautionary tales in mind, she took several measures to protect herself.

First and foremost, Ratna was careful about the information she shared online. She refrained from disclosing personal details such as her full name, address, or work-place until she established a genuine connection and felt comfortable with her potential partner. Instead, she focused on getting to know them through casual conversations, sharing hobbies, and discussing common interests.

Ratna was vigilant about her privacy and ensured that her social media accounts were set to private, limiting access to her personal life. She understood that scammers could use any available information to manipulate or exploit her. By being mindful of her digital footprint, Ratna created an additional layer of protection around herself.

To further ensure her safety, Ratna chose reputable dating platforms with robust security measures. She read reviews, checked their privacy policies, and selected a platform that prioritized user safety and verification. She stayed away from suspicious or lesser-known sites that seemed unreliable or lacked proper security protocols.

She trusted her instincts and exercised caution when communicating with potential matches. She understood that not everything presented online might be genuine. She paid close attention to inconsistencies, red flags, or requests for money, and promptly ended conversations with anyone who made her feel uncomfortable or uneasy.

To take things a step further, Ratna made sure to conduct some background research on her potential suitors. She would perform a quick online search to cross-reference the information they had shared, such as their job, education, or any other significant details. This helped her gain a better understanding of the person's credibility and ensured she was not being misled.

Ratna also prioritized meeting in a public place when taking her conversations offline. She chose coffee shops, parks, or other busy venues for initial meetings, always informing a trusted friend or family member about her plans. She never shared her exact location with her date until she felt secure and had built a certain level of trust.

As Ratna journeyed through the world of online dating, she encountered a few disappointments and some who did not have honest intentions. However, her cautious approach and adherence to safety guidelines protected her from harm. Eventually, she connected with someone who shared her values, interests, and mutual respect for online safety.

Ratna's story serves as a reminder to all who venture into the digital realm of online dating. By being cautious, protecting personal information, trusting instincts, and prioritizing safety, one can navigate the vast virtual landscape with confidence and increase the chances of finding genuine connections while staying safe and secure.

You may reach out to below mentioned helpline numbers or organisations if you need any support.

Women Helpline (All India) - 1091

Women In Distress

Women Helpline Domestic Abuse - 181

Police - 100

National Commission for Women (NCW) - 011-26942369, 26944754

Student / Child Helpline - 1098

National Human Right Commission - 011-23385368/9810298900

Helpline by Tech Sakhi (NGO) - 080 4568 5001 The helpline provides on call assistance to women and LGBTQIA+

and English

Cyber Crime Helpline - 1930

individuals on online safety in Hindi

National Cyber Crime Reporting Portal (https://cybercrime.gov.in)

Internet and Mobile Association of India (IAMAI) (https://www.iamai.in)



Notes to trainer: After narrating the story, Trainer can ask participants to work in groups and jot down some of the key points they remember, from the story, to keep themselves safe during online dating. Give them the handout to write their thoughts or draw it. Give icons for reference. Trainer shall reveal after they write.























Notes to trainer: Discuss with participants. Trainer can ask any random student to come forward, throw the device and then ask them the question mentioned on that number. Trainer can ask any random student to come forward, throw the dice. Whatever number comes on device, trainer shall handover the flashcard with that number. Now, ask them to announce the question mentioned on that number. Participant has to answer the question and tell the reason behind the same.

Notes to trainer: Explain them.

Safe digital communication is a practice of using various communication channels, such as email, instant messaging, social media platforms, and video calls, while prioritizing privacy, security, and respectful interactions. Here are some key aspects of safe digital communication:

Privacy and Personal Information Protection:

Avoid sharing sensitive details such as your full name, address, phone number, or financial information unless necessary. Use privacy settings on social media platforms to control who can view your posts, photos, and personal information. Regularly review and adjust your privacy settings to ensure they align with your preferences and level of comfort. Try using 10-minute mail service apps or websites that provide an access to a temporary mail account for a short duration, which you can use to sign up for services or websites that may use your sensitive information for suspicious activity or may sell it to third party.

Secure Communication:

Use secure and encrypted communication channels whenever possible. Look for platforms or apps that offer end-to-end encryption to protect your messages and data from unauthorized access. There are safe alternative chatting apps like Signal, Telegram that comes with more advanced privacy features. Be wary of suspicious links, attachments, or requests for personal information from unknown sources. Avoid clicking on unfamiliar links or downloading files from untrusted sources.

Notes to trainer: Share the comparison as handout to participants.

Whats app 1 Telegram 1 Signal

Use Anti-Virus:

Utilize antivirus software and keep it updated to protect against malware and other online threats. You shall also use add blockers on websites or VPN services. You may use antivirus like ClamAV (Open source and free) Bitdefender, Avast, Kaspersky etc. There are add block extensions also to block adds or tracking on the browser.

Respectful Online Behaviour:

Avoid engaging in cyberbullying, hate speech, or online harassment. Treat others with kindness, empathy, and respect, even during disagreements or differing opinions. Think before you post or share content online. Consider the potential consequences and how it might affect others or your own digital reputation.

Misinformation:

Develop critical thinking skills to evaluate the authenticity and credibility of online information. Be cautious of misinformation or fake news and verify information from reliable sources before sharing. Stay updated on the latest online threats, scams, and best practices for digital security. Educate yourself about common phishing attempts, social engineering tactics, and other forms of online manipulation.

Personal Boundaries and Consent:

Respect personal boundaries and obtain consent before sharing or posting content that involves others. This includes photos, videos, or personal information about friends, family, or colleagues. Be mindful of the impact of tagging or mentioning others in posts or comments. Always seek permission before tagging someone in a photo or discussing their personal matters online.

Cybersecurity Measures:

Use strong and unique passwords for your online accounts and consider using a password manager to securely store them. Enable two-factor authentication (2FA) whenever possible to add an extra layer of security to your accounts. Regularly update your software, apps, and operating systems to ensure you have the latest security patches and bug fixes.

Notes to trainer: Ask participants to follow the steps and change their Google Account password and Activate data encryption on WhatsApp. Make them do it practically.

Notes to trainer: Explain.

Change or Reset Your Password.

You can change your password for security reasons or reset it if you forget it. Your Google Account password is used to access many Google products, like Gmail and YouTube.

Steps to Change your password.

On your Android phone or tablet, open your device's Settings app Google Account.

- → At the top, tap Security.
- → Under "Signing into Google," tap Password. You might need to sign in.
- → Enter your new password, then tap Change Password.
- → Reset your password.
- You'll be asked some questions to confirm it's your account and an email will be sent to you. If you don't get an email:
- → Check your Spam or Bulk Mail folders.
- → Add noreply@google.com to your address book.
- → To request another email, follow the steps to recover your account.
- → Check all email addresses you might've used to sign up or sign into your account.
- → Choose a password that you have not already used with this account.

WhatsApp Privacy and Data Encryption

Security is essential to the service WhatsApp provides. Thus, WhatsApp implemented end-to-end encryption in 2016 for all messaging and calling on WhatsApp so that no one, has access to the content of your conversations. WhatsApp has no ability to see the content of messages or listen to calls on WhatsApp. That is because the encryption and decryption of messages sent on WhatsApp occurs entirely on your device. Before a message ever leaves your device, it is secured with a cryptographic lock, and only the recipient has the keys. In addition, the keys change with every single message that is sent. While all of this happens behind the scenes.

To verify that a chat is end-to-end encrypted.

- → Open the chat.
- → Tap on the name of the contact to open the contact info screen.
- → Tap encryption to view the QR code and 60-digit number.

Notes to trainer: Explain them.

FOSS (Free and Open-Source Software) password managers are tools that allow users to securely store and manage their passwords. Here are a few examples of popular FOSS password managers:

KeePass:

- → Allows users to store their passwords in an encrypted database.
- → generate complex passwords and two-factor authentication support.

Bitwarden:

- → Offers both cloud-based and self-hosted options.
- → Uses end-to-end encryption to secure user data.
- → Features like password generation, autofill, and secure sharing.

Notes to trainer: Show the following video to participants.





https://www.youtube.com/watch?v=PY_hRHcMlsk





https://www.youtube.com/watch?v=LMRUPFIO244

Unit 2

Fake News

Notes to trainer: Explain to participants.

What Is Fake Information?

Fake information refers to and includes false or misleading information presented as if it were real news, often spread via social media or other online platforms. Fake news is designed to be sensational and attention-grabbing, with the goal of spreading widely and quickly before being fact-checked or debunked.

Complex online and offline information ecosystems frequently extend across physical borders and, whilst the subject matter differs in different countries, the objectives, strategies, and targets of state and non-state actors exhibit similarities. State and non-state actors continue to use sophisticated, well-resourced strategies to influence the communication and information landscape, both in their own and neighbouring countries. Further nationalistic and chauvinistic agendas foment attacks on marginalized communities and result in escalating disputes, undermining transparency and accountability by deflecting responsibility for failures of government policies and programs. This was witnessed even in response to the COV-ID-19 pandemic.

To counter the threats and challenges we face in filtering out the spaces from the factually incorrect information, there is a need to develop the basic understanding of misinformation, disinformation, influence operation and foreign interference as categories. In order to distinguish between different aspects of the problem of countering disinformation or to distinguish between factually incorrect information, there is a need to develop understanding and gain clarity on how each aspect is different from the other and then further categorise the information accordingly.

Categories of fake information:



Disinformation: Stories that aren't true. These are deliberately invented stories designed to make people believe something false, to buy a certain product, or to visit a certain website. It is a catchall label for a range of activities loosely related to misleading information.



Misinformation: Stories that have some truth but aren't 100 percent accurate. For example, a politician attends a conference, but a news story reports that he or she was there to criticize policy rather than to support it. Here the actors' intent is not harmful as the spread of information is often uncoordinated, however, it affects the others' ability to form their own ideas because of such false information. To counter the misinformation, there is a need to build support for unified societal resilience instead of deterring it through policy as it might infringe upon the rights to freedom of expression.



Influence Operations: These are organised attempts to achieve a specific effect among a target audience. It is used to get a competitive advantage over an opponent through the dissemination of propaganda as well as collecting tactical information about an adversary. Influence operations have connotations of soft power, with the terms like deception, propaganda, confusion, cultural and social forces and persuasion falling under it. It is "coordinated efforts to influence a target audience using a range of illegitimate and deceptive means, in support of the objectives of an adversary."

How does Fake News spread?

We know that the creators of fake news and fake news sites check verified news sources. They use facts from these verified news outlets and layer it with misinformation to confuse the reader. When confronted by both the fake news and verified news, people tend to discount both the misinformation and the facts. That's the power of fake news. Additionally, most adults use social media to get their news. Columbia Journalism reports that 30% of fake news can be linked back to Facebook while only 8% of verified news is linked from Facebook. There are fewer fake news sources than verified news sources but with social media, their reach is that much more pronounced.

ABCDE Framework

ABCDE Framework aims to collect and systemize enough data as evidence to help discern the patterns. The idea is to gather such instances and campaigns of misinformation, disinformation, influence operation and foreign interference, to help separate the signal from the noise and to more clearly understand the most significant patterns of them in each country. We will use the framework, tools and diagnosis to break down the problem for effectively mapping it. And then will apply it to the themes.

Actor	What kinds of actors are involved? This question can help establish, for example, whether the case involves a foreign state actor.
Behavior	What activities are exhibited? This inquiry can help establish, for instance, evidence of coordination and inauthenticity.
Content	What kinds of content are being created and distributed? This line of questioning can help establish, for example, whether the information being deployed is deceptive.
Degree	What is the overall impact of the case and whom does it affect? This question can help establish the actual harms and severity of the case.
Effect	What is the overall impact of the case and whom does it affect? This question can help establish the actual harms and severity of the case.

Notes to trainer: Share the case study with the participants on the spreading of fake news.

Notes to trainer: Show the image first and ask participants to tell what they know about this image?

After few participants respond, now explain the below given case study.



A headline that hides more than it reveals: A case study about the widely popularised claims by the Government of India about increase in forest coverage.

Theme: Socio-economic Status

Case study: Forest expansion

Case Study by: Jenny Sulfah & Vineetha Venugopal

The state of India forest report 2021, produced by the Forest Survey of India, under the Ministry of Environment and Forest claims that forest cover in India has expanded. This has been widely reported in the media. However, this claim has been refuted by many scientists and experts. This case will explore narrative building, players, public perception, and its impacts. We will also look into the larger unscientific narrative building surrounding tree planting.

Context:

One of the organisation that received much popularity on environmental protection was Isha Foundation by Jaggi Vasudev popularly known as Sadguru. Isha Foundation, through its 'Rally for Rivers - Cauvery Calling' campaign, initiated a plan to plant 2.42 billion trees along the Cauvery River. However, scientists pointed out that reasons for Cauvery's degradation are the multiple major dams built for hydropower, drinking water and irrigation, rapid urbanization in the catchment area and

rampant sand mining1. Tree planting thus appears to be a simplistic solution that does not take into account the complexity of these problems. Additionally, if not done in a scientific and participatory manner, it can lead to adverse problems. For example, afforestation should suit the landscape and should be done using local gene pools to retain biodiversity and should not lead to monoculture plantations. D. Narasimhan, noted botanist observes as follows: "Riverbanks ought to have riverine vegetation that varies from one section of the river to the other. Grasses, shrubs and wetlands – not merely trees – are essential for the integrity of the river and riverine habitats. Tree-centered economic considerations can often conflict with ecological goals." (As cited by Nityanand Jayaraman). Also, tree planting on village commons and natural grasslands will have adverse social and ecological impacts.

Largely it can be observed that there was an attempt at narrative building where tree planting / tree coverage was being equated with environmental conservation while diverting attention from environmental justice struggles by farmers, fishers and Adivasis against excessive damming, mining and industrial pollution. While scientists and activists have been attempting to counter this narrative, Vasudev and his brand of environmentalism has managed to capture the imagination of the Indian middle class and elite abroad. He was awarded Padmavibhushan, India's second highest civilian award in 2019. The United Nations Environment Program (UNEP) accredited his organization, Isha Foundation with Observer status to the United Nations Environment Assembly and its subsidiary bodies3. Leonardo DiCaprio, Hollywood actor known for his environmental activism, endorsed Vasudev's Cauvery Calling campaign as well.

However, environmental activists who stood with local communities, farmers, Adivasis and fishers have not been as lucky as Sadguru with regard to their treatment by the government. The websites of Let India Breathe, a youth collective, was blocked by National Internet Exchange of India, after it initiated a letter campaign criticizing the draft environmental impact assessment legislation. Police firing against local community members protesting against expansion of a copper smelter plant in Thoothukudi, Tamil Nadu led to 13 deaths. Disha Ravi, a 22-year-old climate activist associated with 'Fridays for future' was arrested for compiling a google doc containing information, hashtags, suggested actions, ideas and contact in support for the 2021 farmer's protest4. Prominent anti mining and tribal rights activist Hidme Markam, from the Koya tribe, arrested in 2021 while protesting the death of a woman in police custody is yet to be released as of June 2022. However, it must be noted that prosecuting environmental defenders was not just done under the rule of current government, but was a practice in earlier governments too.

The state of India Forest report

The India state forest report (IFSR) 2021 was 5published by Forest Survey of India (Ministry of Environment, Forest and Climate Change). Forest cover as reported in IFSR includes all patches of land with a tree canopy density of more than 10% and with the area having more than 1 hectare, irrespective of land use, ownership, and species. It was assessed by remote sensing followed by ground-truthing.

To cite the report, "the current assessment shows an increase of 1540 sq.km (.22%) of forest cover, 721 sq km (.76%) of tree cover and 2261 sq km (.28%) of forest and tree cover together, at the national level compared to previous assessment, IFSR 2019".

This was highlighted as a major achievement by the government. For example, see the press release dated 13 Jan 2022 6by Ministry of Environment, Forest and Climate Change that claims 'Forest Survey report 2021 released; increase of 2,261 sq km in the total forest and tree cover of the country in last two years' and it further claims that 'Total carbon stock in country's forest is estimated to be 7,204 million tonnes, an increase of 79.4 million. Total mangrove cover in the country is 4,992 sq. km, an increase of 17 sq. Km observed'.

PMO India also proudly tweeted this.



The same narrative was repeated at the international forums to show India's commitment to environmental conservation.



A union minister even claimed that India exceeded Aichi targets under the Convention on Biological Diversity.



The same narrative was also repeated by spiritual Ggurus close to the government such as Gurudeva Sri Sri Ravishankar.



IFS (Indian Forest Officers) association also repeated the government narrative.



This narrative was spread by users politically right wing aligned with the ruling party on social media users as well. The tweet below by an influencer with 226.2K followers also takes a not-so-subtle dig against public protests.



Another tweet by a former union minister with 261.8 K followers equates increase in forest coverage with increased protection of biodiversity and wildlife.



Interestingly, Jaggy Vasudev, another spiritual leader close to the government who also engages in environmental activism, remained silent on the report. However, some of his followers were quick to attribute the forest coverage expansion to the success of the Cauvery Calling movement.



While the NASA report indeed acknowledges India for its greening (more than 6% increase in leaf area in a decade) due to ambitious tree planting program and intensive agriculture, it doesn't differentiate between biodiverse forests or monoculture plantations. IFSR 2019, acknowledges that plantations/trees outside forests' already account for nearly 9% of the total area under forests.

Hidden information

However, these posts mask the real loss in forest coverage. Three such factors highlighting the real state of forest coverage in India were deliberately omitted by the governmental agencies and the supporters.

Firstly, IFSR improved its resolution from 1:250,000 to 1:50,000 thus enabling it to capture any land even small as 0.01 Sq. km with more than 10% canopy area as forest including small, denuded forests that were not captured earlier contributing to 'forest gain'7.

Secondly, no distinction is made here on the grounds of land ownership, legal status, land use, ecosystem, or the type of trees. The green cover recorded by satellites as forest cover may include tree orchards, bamboo, palms and coconut trees, canal-side plantations, rubber, tea, and coffee plantations8.

Thirdly, from the report itself, forest coverage under moderately dense forests is shrinking, but open forests are increasing thus indicating a decline in old and protected forests9. The report also shows a worrying trend of decrease in forest in forest coverage in Northeast India which are old and biodiverse with high carbon sequestration capacities.

These factors were not shared by the government agencies or their supporters while the headline 'Increase in forest coverage' was widely shared.

Applying the ABCDE framework

Actor

Union ministers, Supporters and bureaucrats. Scientists, environmental activists and environmental journalists print and online media some of the actors acted in a personal capacity while some acted in official and political capacity

Behaviour

Non-abusive, sharing information in international forums (hiding methodology and nuances in public) by state actors (element - deliberately deceptive behaviour)

And exposing the methodology and providing on ground evidence for forest degradation by non-state actors

It appears most persons acting in private capacities shared the headline with genuine intentions believing it to be true

Content

True as per State of Forest report; verifiable; tone - self congratulatory and pride. Mostly shared by English language speaking users

Degree

Audience: UN agencies (UNNCD, UNEP), general public Limited coordination between governmental agencies and supporters no microtargeting or inauthentic boost could be identified

Effect

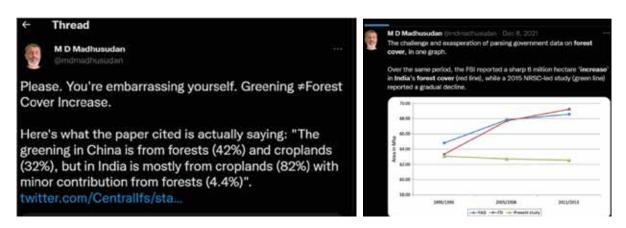
Critiqued by experts and environmental organizations but the false perception that forest cover has increased will pose difficulties for environmental conservation and would speed up forest degradation. Thus, adversely impacting socio-economic status and sustainable development

Category: Disinformation

Diagnosis was arrived at by looking at behaviour and content. methodology and nuances were deliberately hidden by state actors, but it was verifiable)

Critical response

The claims of the government were refuted by multiple experts and environmental organisations. Chief among them being MD Madhusudan, senior scientist (on sabbatical) of Nature Conservation Foundation, a Bangalore based environmental organisation. He responded to the tweet by the IFS officers as follows and subsequently, they deleted the tweet.



He further presented evidence supporting his claims.

Madhusudan's arguments were further supported by other environmental organisations and scientists. Twitter users pointed out how residential green cover was covered as forest.



Articles were also published in print media refuting the claim with an environmental magazine observing 'India is losing its existing natural forest cover and compensating it with mere plantations" 10 Global Forest Watch (affiliated with World Resource Institute) reports also refuted the government claims.

"Data from GFW suggests India also lost a larger area under tree cover in humid primary forests in 2020 (20.8 kilo hectares) compared to 17.3 kha in 2019. From 2002 to 2020, India lost 349 kilo hectares of humid primary forest, making up 19% of its total tree cover loss in the same time period. The total area of humid primary forest in India decreased by 3.4% during this period.11"

A report from Hindu12 observes as follows:

"Starting in 2001, the ISFRs made some big changes to the way they classified and counted pixels in a satellite image as forest. They began using finer-scaled satellite imagery and an entirely digital workflow to analyse them. In addition, the ISFRs also changed their definition of a forest. They now explicitly included any lands of at least one hectare area and with 10% or more tree cover, regardless of the tree species on the land, or the purpose for which it was grown, or its ownership, as forest. So, all of a sudden, tea estates, coconut plantations, mango orchards, homestead gardens of suburban housing developments, and even tree-lined avenues in densely built-up cities were being classified as 'forest'. In one stroke, just between 1999 and 2001, this redefinition helped raise India's forest cover by over 38,000 sq.km., the size of Kerala."

Media platforms that gave comprehensive coverage to the issue included environmental media such as Mongabay, Wire Science, and Down To Earth

Concluding remarks

This false narrative that forest coverage has increased would enable governments to go ahead with diversion of actual forest for dams, mines and mega industrial projects at the same time appeasing international environmental organisations. These diverted lands often belong to Adivasis, fishers and other marginalised communities.

Popularisation of these narratives also portrays afforestation as a single solution for environmental issues. This is problematic as India government's compensatory afforestation program itself has been critiqued for planting monoculture plantations and grabbing land belonging to local communities13. Additionally, new forest saplings cannot compensate for the loss of carbon stocks or ecosystem services provided by old forests.

This focus on forest coverage can also be used to divert attention from other issues like massive erosion faced by India's coasts, landslides due to infrastructure projects in northeast India, suppression of grassroots environmental justice movements and anti-environmental legislations.

Notes to trainer: Explain participants.

Examples of fake news include:

Conspiracy theories about the COVID-19 pandemic, such as the claim that the virus was created in a laboratory or that it is a hoax.

False information about political candidates or issues, such as the claim that a particular politician is involved in a scandal or that a proposed policy would have catastrophic consequences.

Misleading or false health claims, such as the claim that a particular supplement or diet can cure cancer or other serious diseases.

False or exaggerated reports about natural disasters or other emergencies, such as the claim that a hurricane was going to be much more destructive than it actually was.

Photos or videos that have been doctored or manipulated to present a false impression or narrative.

Tips for evaluating news.

Vet the publisher's credibility.

Pay attention to quality and timeliness.

Check the sources and citations.

View reliable news channels information like DD News or Aakash Wani.

Prefer reading news portals Alt news which runs on donations not by advertisements. Donations based News portals generally publish unbiased real information as they are not dominated by advertising agencies.

Do a proper fact check of news or information using independent portals like "Factly" or Factchecker.in.

Visit and check information on official government websites. You may also visit government website of Press Information Bureau (PIB) for doing a fact check.

Use tools like google revere image search, as these tools will let you find the original source of image that may be edited and circulated on internet.

Tips for taking actions against fake news.

If you find a news that's circulated on WhatsApp, Facebook, Twitter, Instagram or any other social media platform, you may use the option to "Report" the particular information. You may read the steps on how to report fake information here.

For Facebook - https://www.facebook.com/help/572838089565953

For Wikipedia - https://en.wikipedia.org/wiki/Wikipedia:Contact_us/Readers

For WhatsApp - https://faq.whatsapp.com/431498999157251

You may also report the complaint to Cyber Information Cell or any legal authorities regarding any fake information. Under National Security Act (NSA), a case may be registered against a person who spread fake information.

Case Study of Manish Kashyap, a YouTuber arrested for allegedly spreading fake videos of attacks on Bihar migrant labourers in Tamil Nadu. A video shot by him in Patna, which he uploaded by misrepresenting as shot from Tamil Nadu and alleging that Biharis are getting attacked their Source: https://thewire.in/law/manish-kashyap-bihar-tamil-nadu-migrants

Notes to trainer: Play Raja, Rani, Mantri, Chor, Sipahi, Game with participants.

Rules

- 1. Distribute participants in the group of 5 each. If many participants are not available, then accordingly divide them in the group of 3 to 5 each. If only 3 to 5 participants are there, then repeat the rounds with the same set of 3 to 5 participants.
- 2. In each group, give one-one chit of Raja, Rani, Chor, Mantri and Sipahi (Remove Rani and Mantri if 3 participants are there)
- 3. The Chor has to identify who is giving the correct fact about a thing out of the other participants. If chor is able to identify the correct fact, then he will get the maximum points or else he will lose, and maximum points will stay with Raja who is going to give the correct fact.
- 4. Rest of the participants will get the points as per their chit only.
- 5. Participants not to reveal their positions until chor chooses one of them with correct information.
- 6. The king is the only one having the correct information.
- 7. Award a gift to the participants who are able to score maximum points.

Notes to trainer: Distribute the chits to the participants.

Notes to trainer: Ask students to follow the below mentioned checklist and do some research on a news article they can find online on the topic, "Upcoming Economy of India."

1. Do a visual assessment Assess the overall design, Fake news sites often look amateurish, have lots of annoying ads, and use altered or stolen images. Overall, does the news article and website seem high quality? 2. Identify the News outlet The wall street journal and CNN are example of news outlets. If you haven't heard of the news outlet, search online for more information Is the news outlet well known, well respected, and trustworthy? 3. check the Web Domain Many fake news URLs look odd or end with .com.co or .lo (eg, abcnews.com.co) to mimic legitimate news sites Does the URL seem Legitimate? 4. Check "About Us" section Trustworthy news outlets usually include detailed background information, policy statements, and email contacts in the "About Us" section Does the site provide detailled background information & contacts? 5. Identify the Author Fake news article often don't include author names, If included search the author's name online to see if he or she is well known and respected. Does the article have a trusted author? 6. Identify the Central Message Read the article carefully, fake news articles often push one viewpoint. have an angry tone, or make outrageous claims. Does the article seem fair, balanced, and reasonable? 7. Assess Spelling Grammar, and Punctuation If the article has misspelled words, words in ALL CAPS, poor grammar, or lots of "!!!!!" it's probably unreliable.

Does the article have proper spelling, grammar, & Punctuation?

8. Analyze sources and quotes

Consider the article's sources and who is quoted. Fake news article site annonymous sources, unreliable sources or no sources at all. Does the article Include and Identify reliable sources?



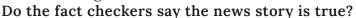
9. Find Other Articles

Search the Internet for more articles on the same topic. If you can't find any chances are the story is fake Are there multiple articles by other news outlets on this topic?



10. Turn to Fact Checkers

Factcheck.org, snopes.com, politifacts.com are widely trusted fact-checking websites.



11. Is the same information available on a government or central agency website?.



12. Is the image used real or fake using google reverse image tool?



Unit 3

Using Social Media

Spreading fake news on social media refers to the act of sharing or disseminating false or misleading information through social networking platforms such as Facebook, Twitter, Instagram, and WhatsApp, among others. The spread of fake news on social media has become a major issue in recent years, with the potential to influence public opinion and even impact important events like elections.

A piece of fake news can be shared with a large number of people within a short time, and can quickly gain traction through likes, shares, and comments. In addition, social media algorithms are designed to prioritize content that is likely to generate engagement, which can further amplify the reach of fake news.

Fake news can take many forms, including fabricated stories, manipulated images and videos, and misleading headlines. It can be spread intentionally by individuals or groups seeking to manipulate public opinion for political or financial gain, or it can be spread unintentionally by well-meaning individuals who are simply unaware that the information they are sharing is false.

To combat the spread of fake news on social media, it's important for individuals to exercise caution when consuming and sharing information online. This includes verifying the credibility of sources, fact-checking claims, and being aware of the potential biases and agendas of the individuals or groups behind the information. Social media platforms also have a responsibility to take steps to prevent the spread of fake news, including algorithmic changes, fact-checking initiatives, and user education campaigns.

Some examples are:

During the COVID-19 pandemic, a video was circulated on social media claiming that inhaling steam could kill the coronavirus. This information was false, and health experts warned that inhaling steam can actually cause harm to the respiratory system.

Ahead of the Indian General Election in 2019, fake news and misinformation about various political parties and candidates was spread on social media platforms. This included doctored images and videos, fake quotes attributed to politicians, and false claims about their records and policies.

In 2020, there were widespread rumours on social media about the possible link between the new 5G technology and the spread of the coronavirus. These claims were false and not supported by scientific evidence, but they led to attacks on cell phone towers and other acts of vandalism in some countries.

In 2021, a social media post claiming that the Indian government was planning to cancel all board exams for Class 10 and 12 students went viral, causing panic among students and parents. The post was found to be fake, and the government later confirmed that the exams would be held as scheduled.

Activity 12

Notes to trainer: Show the following video to participants.





https://www.youtube.com/watch?v=LwcmFpngHXk

Unit 4

Logical Fallacies

Activity 13

Notes to trainer: Explain the logical Fallacies to the participants in tandem with the video.

Logical fallacies are errors in reasoning that can make an argument or claim to appear as valid, even when it's not. It's an argument based on faulty reasoning. While fallacies come in a variety of forms, they all share the same destructive power, namely, to dismantle the validity of your entire argument.

By masquerading as legitimate arguments, they can fool us into thinking that they are legitimate. But closer inspection reveals the critical flaw at the heart of any given logical fallacy. Such flaws are not always easily detected, especially in the heat of debate.

To confound matters, logical fallacies often have an element of truth. But the truth gets misused by faulty logic so that the desired conclusion is not properly justified. A fallacy may even reach a true conclusion, but by arriving there in the wrong way, render the conclusion unconvincing. Moreover, fallacies aren't always driven by the desire to deceive or manipulate. Fallacies can also be rooted in bias, emotion, or misunderstanding, which can sometimes be less immediately apparent.





 $https://www.youtube.com/watch?v=_wgH0cfe828\&list=PLcyVkNeXvb4hn57\\t2SYDj0HKdI3sz6qwN\&index=10\&ab_channel=ColburnClassroom$

Notes to trainer: Explain the logical fallacies to the participants along with the video.

Logical fallacies are errors in reasoning that can make an argument or claim appear valid, even when it's not. It's an argument based on faulty reasoning. While fallacies come in a variety of forms, they all share the same destructive power, namely, to dismantle the validity of your entire argument.

By masquerading as legitimate arguments, they can fool us into thinking that they are legitimate. But closer inspection reveals the critical flaw at the heart of any given logical fallacy. Such flaws are not always easily detected, especially in the heat of debate.

To confound matters, logical fallacies often have an element of truth. But the truth gets misused by faulty logic so that the desired conclusion is not properly justified. A fallacy may even reach a true conclusion, but by arriving there in the wrong way, render the conclusion unconvincing. Moreover, fallacies aren't always driven by the desire to deceive or manipulate. Fallacies can also be rooted in bias, emotion, or misunderstanding, which can sometimes be less immediately apparent.





https://www.youtube.com/watch?v=_wgH0cfe828&list=PLcyVkNeXvb4hn57t 2SYDj0HKdI3sz6qwN&index=10&ab_channel=ColburnClassroom

Notes to trainer: Perform the activity with participants in groups. Ask participants to use their mobile phone internet to research the information.

- 1. Share the participants with a list of common logical fallacies.
- 2. Divide the participants into small groups and give them a list of arguments or claims that contain logical fallacies.
- 3. Ask each group to identify the fallacy in each argument and explain why it is a fallacy.
- 4. Now, Participants to come up with their own argument or claim that contains a logical fallacy.
- 5. After they've created their argument, ask them to present it to the rest of the group and see if anyone can identify the fallacy.
- 6. Ask them to share their experiences and insights from the activity, including what they learned about logical fallacies, why they are important, and how they can be avoided.

Unit 5

Cognitive Biasness

Activity 16

Notes to trainer: Explain Cognitive Biasness to the participants.

Cognitive biases are mental shortcuts or patterns of thinking that can lead to errors in judgment and decision-making.

Cognitive Bias is when people process and interpret information about the world. Individuals construct a subjective, constructed reality not based on objective inputs or facts, which in turn then impacts decision making and behaviour. It can lead to inaccurate judgements, illogical interpretations or distorted perceptions and is sometimes referred to as irrationality.

Example:

- 1. If someone believes that vaccines are harmful, they may only seek out information that confirms this belief and ignore any evidence to the contrary.
- 2. People may be more afraid of flying than driving even though driving is statistically more dangerous, because plane crashes are more memorable and get more media attention.
- 3. If a car salesman starts negotiations with a high price, a buyer may feel that any lower price is a good deal, even if it's still above market value.
- 4. Someone may start using a certain brand of phone because it's popular among their friends, rather than because they've researched and found it to be the best option for their needs.
- 5. If a product is marketed as being "90% fat-free" people may perceive it as healthier than a product marketed as having "10% fat."

Notes to the trainer: Perform the activity by dividing participants in the groups to make them understand Cognitive Biasness

Divide students into pairs or small groups. (Total pairs or groups shall not be more than 5)

Give each group an image.

Instruct students to look at the images for 30 seconds and then ask them to write down as many different interpretations as they can.

After the set amount of time, ask students to share their interpretations with their group.

Now, give each group a task of finding or creating an article that supports their interpretation. Tell students to use the internet or any available resources to find an article that supports their interpretation of the images.

Once they find the article, ask them to read and summarize it in a paragraph.

Finally, ask each group to present their interpretation and the supporting article to the class.

Have a discussion with the class about how the cognitive bias might have influenced their interpretations and the articles they found.











Unit 6

Conclusion

Activity 18

Notes to trainer: Explain different ways to stop spreading of fake news.



1. Fact-Checking: Organizations like PolitiFact, Snopes, and Fact-Check.org verify news stories to determine their accuracy. You can check for accurate information and debunk fake news stories using fact-checking. It can help to prevent the spread of misinformation. Learners shall check source of information from websites which are IFCN (International Fact Checking Network) certified.

Example: During the 2020 US presidential election, many false claims were made about voter fraud. Fact-checking organizations like PolitiFact and FactCheck.org debunked these claims and provided accurate information about the election.



2. Social Media Policies: Social media platforms can play an important role in stopping the spread of fake news. Social media portals like Facebook, WhatsApp, twitter has implemented policies that prohibit the sharing of fake news and provide users with the tools to report false information.

Example: During the COVID-19 pandemic, social media platforms like Facebook, Twitter, and Instagram implemented policies to prevent the spread of false information about the virus. These policies included fact-checking and removing posts that contained false information.



3. Trusted News Sources: Always rely on reputable news sources that can help to prevent the spread of fake news. By promoting trusted news outlets, people are less likely to believe and share fake news stories.

Example: During the COVID-19 pandemic, the World Health Organization (WHO) provided accurate information about the virus and encouraged people to rely on trusted sources of information. This helped to prevent the spread of false information about the pandemic.



4. Alternate Media: Alternate media refers to any form of media that provides an alternative perspective on issues, events, and ideas, beyond what is presented in mainstream media. This can include social media, citizen journalism, blogs, podcasts, independent news outlets, and more.

Example: One example of the power of alternate media is the case of the Kisan Long March in India. In 2018, tens of thousands of farmers from across the state of Maharashtra marched to Mumbai, demanding better prices for their crops and relief from mounting debt. The mainstream media initially ignored the march, but alternate media outlets, including social media and independent news sites, provided extensive coverage of the protest and the demands of the farmers.

As the coverage of the Kisan Long March gained traction on alternate media platforms, mainstream media outlets were forced to take notice, and the protest gained national attention. The pressure from the media coverage, as well as the public support generated through alternate media channels, ultimately led to the government meeting many of the farmers' demands.

One of the main benefits of alternate media is that it provides a platform for diverse voices to be heard and for marginalized communities to share their stories. This can lead to greater awareness and understanding of different perspectives and issues, as well as greater accountability of those in power.

Similarly, mainstream media often follows a set path and relies on established sources and perspectives. However, alternate media offers a new path, forging new ways to tell stories and share information. This can lead to greater understanding, awareness, and change, as well as holding those in power accountable for their actions.



5. News based on donations not advertisements.

Media houses that work based on donations rather than advertisements are often referred to as non-profit or independent media organizations. These media houses are free from the pressures of advertisers and corporate interests and are more likely to report on issues that matter to the public interest, without bias or influence.

Example: The Intercept is an independent media organization that relies on donations to fund its operations. The Intercept has broken several high-profile stories, including the NSA's surveillance program and the use of drones by the U.S. military. These stories were not being covered by mainstream media outlets at the time, highlighting the importance of independent media in holding those in power accountable.

One example of the power of non-profit media organizations in investigative journalism is ProPublica, a non-profit media organization that has won several Pulitzer Prizes for its investigative reporting. ProPublica relies on donations to fund its operations and has uncovered several important stories, including the use of algorithms in the criminal justice system and the impact of climate change on natural disasters.

In summary, relying on media houses that work based on donations rather than advertisements can offer several advantages, including greater independence, a focus on public interest stories, and a commitment to investigative journalism. These media organizations are more likely to be free from corporate interests and pressures, leading to more in-depth and unbiased reporting.

Raise Red Cards or Green Cards

Notes to trainer: Show students flashcards containing certain image or information. Ask students to identify if the image or information is fake or real. If they think, its real, they will raise green cards, if they think it is fake, then they will raise red cards.

After they raise cards, reveal the answers.

Information	Answer
India is world largest importer of milk.	Information is fake. The world's largest producer of
	milk is India, and it is also the world's largest
	consumer of dairy products.
The first rocket in India was transported on a bicycle	The information is real
to the launch site.	
In past few years, India has got the highest number	Information is fake. India has the world's largest
of non-vegetarians	population of vegetarians, with more than 500 million
	vegetarians living in the country.
India is one of the top importers of spices from	Fake, India is the world's largest producer of spices,
other countries	with more than 2.7 million tons of spices produced
	each year
India is the birthplace of chess, with the game being	The information is real
invented in the country more than 1,500 years ago.	

Post Assessment

1. What is Critical Digital Literacy?

- A) The ability to use digital devices
- B) The ability to critically produce and consume digital content
- C) The ability to program digital devices
- D) The ability to create digital content

2. What is the impact of fake news and misinformation?

- A) It can cause harm to individuals and society
- B) It has no impact on individuals and society
- C) It can be entertaining and informative
- D) It is necessary for freedom of speech

3. What are the characteristics of reliable sources of information?

- A) Sensational headlines and clickbait
- B) Anonymous sources and rumours
- C) Clear authorship and credible references
- D) All of these

4. What is the ethical responsibility of digital citizens?

- A) To share any information, they come across
- B) To fact-check information before sharing
- C) To share information that supports their beliefs
- D) To avoid engaging in digital discourse

5. How can critical digital literacy skills be useful in everyday life?

- A) To evaluate the reliability of information
- B) To spread fake news and misinformation
- C) To blindly accept information without question
- D) To create clickbait content for social media

6. Short Questions

- A) What are some practical ways to fact-check information and identify bias and propaganda?
- B) How can you identify and evaluate reliable sources of information?
- C) What are the consequences of spreading fake news and misinformation?
- D) What is the ethical responsibility of digital citizens when it comes to sharing information on social media?
- E) How can critical digital literacy skills help you in your personal and professional life?



Digital Literacy | Media Information Literacy Comprehensive Learning | Critical Digital Literacy To Get Our Humara MIL Kit Or Do a Training Session In Comprehensive Media Information Literacy