

WISEME TEACHER'S GUIDE



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RESPONSIBLE SOCIETY

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INTRODUCTION

In today's digital world, the need for critical thinking and engagement with information has never been more important. Social media platforms and other online platforms have revolutionized the way we consume, share, and interpret information, often at expense accuracy and trustworthiness. Schools, as a formative space for developing informed and critical individuals, are vulnerable to misinformation online and fake news.

This handbook is designed to address these issues, equipping educators with the knowledge, skills, and resources to foster a culture of critical thinking and responsible information sharing among students.

The handbook is structured around a series of interconnected modules, each addressing an aspect of misinformation and strategies in a specific context. The seventh and last module is WISEME into Practice: How to handle it.

The first module is Introduction to Misinformation and Fake News. This module explores the definitions and historical context to understand misinformation better. In addition, it looks at the effects of misinformation on society, politics, and education and the consequences for students and teachers to explore the impact of fake news.



The second module Social Media and Information Consumption explores social media platforms and their influence on students. The module also focuses on media literacy and critical consumption.

The third module Psychological and Emotional Reactions to Misinformation is focused on understanding the emotional impact of misinformation and building emotional resilience against misinformation.

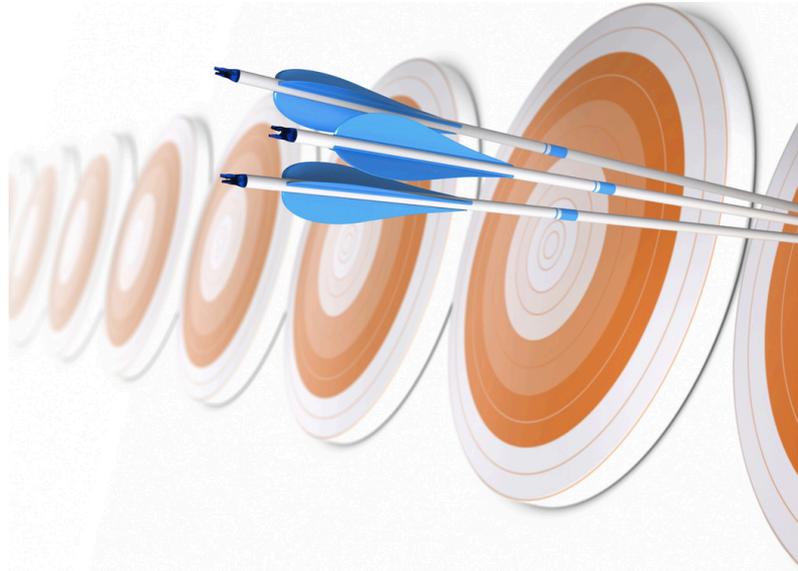
The fourth module Ethical Considerations and Responsible Information is about ethics in information sharing and responsible digital citizenship.

Module five, Identifying Fake News and Disinformation, discusses the common traits of Fake News and how to fact-check and verify online information. The sixth module is Apply this knowledge in Your Area.

This module is about applying know activities to be implemented in class. This module contains a range of digital-free activities that teachers can implement with their students.

Accompanied by an Online Learning Platform and practical activities, this handbook serves as a comprehensive guide for empowering educators and students to navigate the digital information landscape responsibly and effectively.





MODULE 1: INTRODUCTION TO DISINFORMATION & FAKE NEWS

MODULE OVERVIEW

This module is designed to introduce adolescents aged 12-17 to the concepts of disinformation and fake news, through an understanding of information disorders.

It aims to equip them with the critical thinking skills needed to identify and evaluate information and to promote responsible digital citizenship

MODULE OBJECTIVES

Upon completion of this module, students will be able to:

- ◆ Define information disorders
- ◆ Identify the sources and motivations behind the spread of disinformation
- ◆ Recognize common tactics used to spread disinformation
- ◆ Evaluate the credibility of information
- ◆ Apply critical thinking skills to analyze information
- ◆ Practice responsible sharing of information online

STRUCTURE OF THE MODULE

1.1. Understanding information

- ◆ Concepts to be understood
- ◆ Related vocabulary
- ◆ The role of social media in spreading inaccurate information
- ◆ Psychological factors and tactics to spread disinformation

1.2. Impact of information disorders

- ◆ Effects of information disorders on society, politics, and education
- ◆ Personal consequences affecting citizens
- ◆ Types of disinformation





1.1. UNDERSTANDING INFORMATION

Nowadays information abundance around us makes the understanding of information a very difficult task. Because of this situation a conceptual framework becomes necessary for a proper understanding of the information disorder emerged and spread, helping in the task of identifying the sources and motivations behind the spread of disinformation. According to Wardle and Derakhshan (2017) we need to understand three components:

1) TYPES of information disorder:

- ◆ Misinformation
- ◆ Disinformation
- ◆ Mal-information

2) ELEMENTS of information disorder:

- ◆ Agent
- ◆ Messages
- ◆ Interpreter

3) PHASES of information disorder:

- 1 Creation
- 2 Production
- 3 Distribution

A) CONCEPTS TO BE UNDERSTOOD FOCUSING ON TYPES OF INFORMATION DISORDER:

- ◆ **Misinformation:** False or inaccurate information that is spread unintentionally. This can happen due to honest mistakes, misunderstandings, or a lack of proper verification. Examples: Rumors, gossip, hearsay, accidental errors in reporting.
- ◆ **Disinformation:** False or inaccurate information that is spread intentionally to deceive or manipulate. This is often created with malicious intent and can be used to harm individuals, groups, or society as a whole.
- ◆ **Mal-information:** Accurate information that is used with malicious intent to cause harm. This can involve leaking private information, sharing sensitive data out of context, or using true facts to spread hatred or division.



What about Fake News concept?

Although we offer a definition of the term it is worth noting that this is a controversial term defined by several authors and journalists as absolutely inaccurate: “fake news’ is woefully inadequate to describe the complex phenomena of mis- and disinformation” (read more in Information disorder)

Fake News: False stories that appear to be news, spread on the internet or using other media, usually created to influence political views or as a joke (Cambridge Dictionary). Fake news is deliberately false or misleading information created to deceive or manipulate. False stories that appear to be news. Examples: Hoaxes, satire, propaganda, clickbait.

All these concepts together constitute what we know as “information disorders”. The lack of accurate and trustworthy information can cause serious consequences.

In the process of understanding any information disorder, it is useful to consider **ELEMENTS** involved as explained by Wardle and Derakhshan (2017, p. 28, [Questions to ask about each element](#)):

- ◆ **Agent.** Who were the ‘agents’ that created, produced and distributed the example, and what was their motivation?
- ◆ **Message.** What type of message was it? What format did it take? What were the characteristics?
- ◆ **Interpreter.** When the message was received by someone, how did they interpret the message? What action, if any, did they take?



To complete the conceptual framework, we need to examine the **PHASES** of Information disorder:

- ◆ **Creation.** The message is created.
- ◆ **Production.** The message is turned into a media product.
- ◆ **Distribution.** The message is distributed or made public.

This can be better understood with a real example:

[The True Story Behind The Biggest Fake News Hit Of The Election’ from BuzzFeed](#)



B) ASSOCIATED VOCABULARY (FROM CAMBRIDGE DICTIONARY)

Information:	Information regarding a circumstance, individual, occurrence, etc. Updates, details, or insights.
Fact:	An occurrence or existence that is recognized, particularly one for which evidence is available or regarding which information exists.
Truth:	The characteristic of being true
Trustworthy:	Is reliable.
Objectivity:	The quality of being grounded in facts and not swayed by personal beliefs or emotions.
Hoax:	A scheme to mislead someone.
Clickbait	A digital narrative, headline, visual, etc., designed to capture interest and motivate individuals to click on a hyperlink.
Infodemic:	A scenario in which a significant amount of misinformation is disseminated in a harmful manner.
Bias:	The act of favoring or opposing a specific individual or entity in an unjust manner by permitting personal beliefs to affect your assessment.

C) THE ROLE OF SOCIAL MEDIA IN SPREADING INACCURATE INFORMATION

Social media platforms have revolutionized not only the way we communicate and consume information but the way it is distributed and who distributes it. While they offer numerous benefits, they also create fertile ground for the spread of information disorders. Here are some key factors that contribute to the spread of misinformation, disinformation or fake news on social media:

Widely accessibility and algorithmic amplification: leading information:

Social media has fostered technology that allows anyone to create and distribute any content. In addition, social media algorithms prioritize content that is likely to generate engagement, which can lead to the amplification of sensational or misleading information.

Lack of Fact-Checking and information consumption:

Many users share information without verifying its accuracy, leading to the rapid spread of false or misleading claims. This is greatly facilitated by the shift in the information consumption, from private to public.

Bot Accounts and Troll Farms:

Malicious actors use automated accounts and coordinated campaigns to spread misinformation and manipulate public opinion.

Echo Chambers:

Social media can create echo chambers, where users are only exposed to information that confirms their existing beliefs. This can make them more susceptible to misinformation and less likely to critically evaluate information.

D) PSYCHOLOGICAL FACTORS AND TACTICS TO SPREAD DISINFORMATION

Understanding the psychological factors that contribute to the spread of disinformation:



Confirmation bias:

The tendency to favor information that confirms our existing beliefs.

Emotional response:

Strong emotions like fear, anger, or surprise can make us more likely to share information without critically evaluating it

Cognitive biases:

Mental shortcuts that can lead to errors in judgment.

TACTICS USED TO SPREAD DISINFORMATION:



Emotional manipulation:

Using strong emotions such as fear, anger, or outrage to capture attention and bypass critical thinking

Misleading headlines:

Using misleading or sensational headlines to attract clicks.

False information:

Creating or sharing completely fabricated information and distorting facts or taking information out of context.

Misleading images:

Altering images or videos to create false narratives.

Conspiracy theories:

Promoting unfounded theories, often involving secret plots or hidden agendas.

1.2 IMPACT OF INFORMATION DISRUPTIONS

a) Effects of information disruption on society, politics and education

Information disruption has far-reaching consequences for society, politics, and education. These harmful practices can erode trust, polarize societies, and undermine the democratic process.

Impact on society

- ◆ Erosion of trust: The spread of fake news can erode trust in traditional institutions, such as the media, government, and academia. When people are constantly bombarded with false information, they become skeptical of even credible sources.
- ◆ Social division: Fake news can exacerbate social divisions by promoting stereotypes, spreading hate speech, and inciting violence. It can create echo chambers where people are only exposed to information that confirms their existing beliefs, leading to polarization and intolerance.
- ◆ Public health crises: During public health emergencies, the spread of misinformation can hinder efforts to control the outbreak. False information about vaccines, treatments, and preventive measures can lead to vaccine hesitancy, noncompliance with public health guidelines, and ultimately increased morbidity and mortality.

Impact on Politics

- ◆◆ **Polarization and Extremism:** Fake news can fuel political polarization by amplifying partisan divisions and promoting extremist ideologies. It can be used to manipulate public opinion, sway elections, and undermine democratic processes.
- ◆◆ **Undermining Democratic Institutions:** By spreading false information about elections, voting procedures, and government policies, fake news can undermine trust in democratic institutions and erode public confidence in the electoral process.
- ◆◆ **International Relations:** The spread of disinformation can exacerbate tensions between countries, leading to diplomatic crises and even conflict. It can be used to spread propaganda, sow discord, and undermine international cooperation.

Impact on Education

- ◆◆ **Critical Thinking Skills:** The constant exposure to misinformation can hinder the development of critical thinking skills. Students may struggle to distinguish between fact and fiction, and they may become more susceptible to manipulation.
- ◆◆ **Digital Literacy:** It is essential to equip students with the digital literacy skills needed to navigate the online information landscape. This includes the ability to evaluate the credibility of sources, identify biases, and detect logical fallacies.
- ◆◆ **Civic Engagement:** Fake news can discourage civic engagement by creating a sense of cynicism and apathy. If people believe that the information they are receiving is false or misleading, they may be less likely to participate in democratic processes.

To mitigate the negative impacts of fake news and disinformation, it is crucial to promote media literacy, critical thinking, and digital citizenship. By empowering individuals to evaluate information critically and to recognize the tactics used to spread misinformation, we can work towards a more informed and resilient society.

B) Personal consequences affecting citizens

Disinformation and fake news can have significant personal consequences for individuals. Key impacts:

1

Eroded Trust:

- **Distrust in Institutions:** Constant exposure to false information can erode trust in institutions like the media, government, and academia. This can lead to a general sense of cynicism and skepticism.
- **Damaged Relationships:** Sharing false information or believing in conspiracy theories can strain relationships with friends, family, and colleagues

2

Poor Decision-Making:

- **Financial Loss:** Falling victim to scams or fraudulent schemes propagated through misinformation can lead to significant financial losses.
- **Health Risks:** Misinformation about health issues, such as vaccines or treatments, can lead to poor health decisions and serious health consequences.

3

Emotional Distress:

- **Anxiety and Stress:** Constant exposure to negative and sensational news can increase anxiety and stress levels.
- **Depression:** Feeling overwhelmed by misinformation and the constant need to verify information can contribute to feelings of depression and hopelessness.

4

Social Isolation:

- **Echo Chambers:** Consuming only information that aligns with one's existing beliefs can lead to social isolation and a lack of empathy for diverse perspectives.
- **Reduced Social Interaction:** Spending excessive time online consuming and sharing misinformation can reduce opportunities for real-world social interaction.

5

Cognitive Bias:

- **Confirmation Bias:** Misinformation can reinforce existing biases, making it difficult to consider alternative viewpoints.
- **Reduced Critical Thinking Skills:** Constant exposure to false information can hinder the development of critical thinking skills and make individuals more susceptible to manipulation.

In conclusion, disinformation and fake news can have a profound impact on individuals' lives, affecting their mental health, financial well-being, and social relationships. It is crucial to be aware of the dangers of misinformation and to develop the skills to critically evaluate information. In this regard it is essential to recognize types of disinformation.

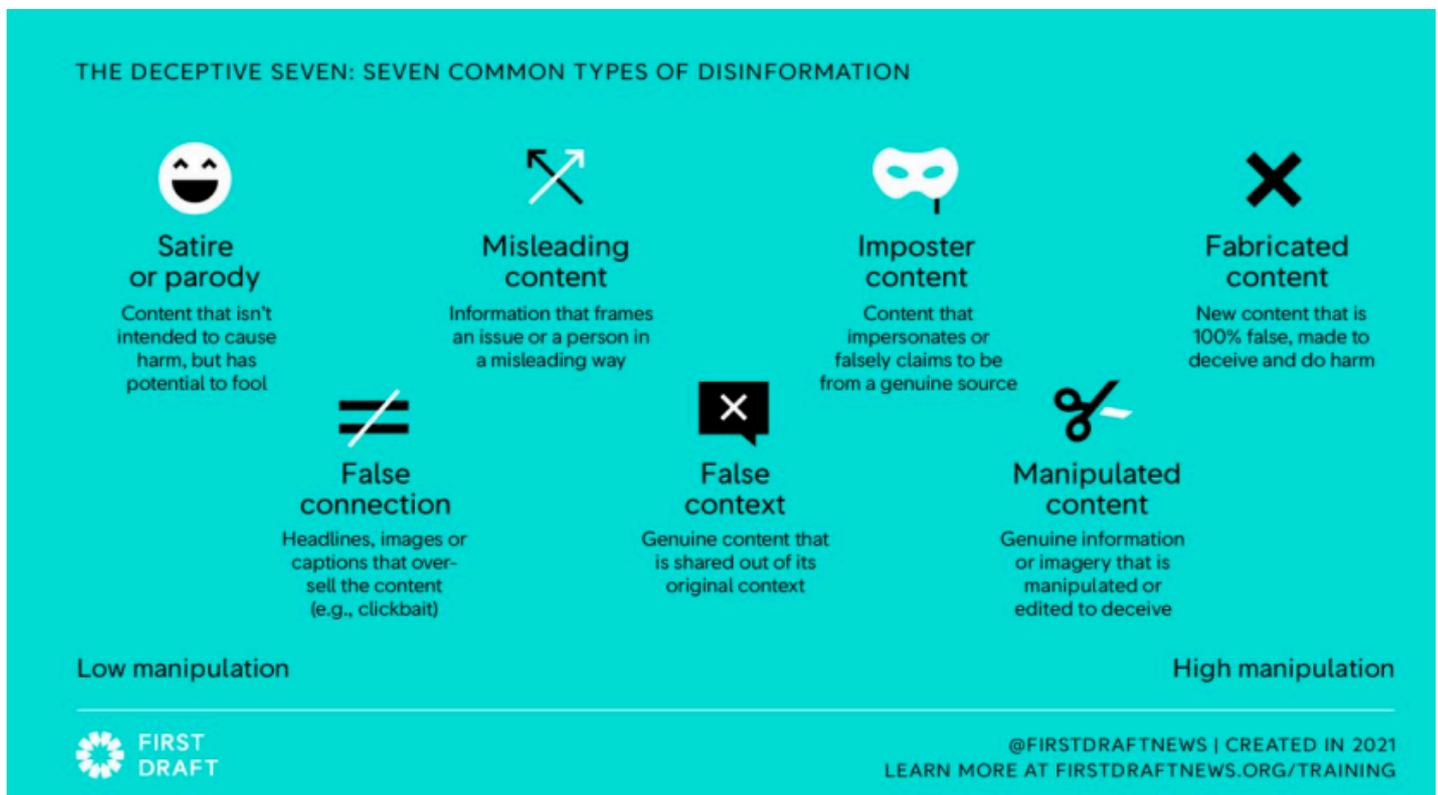
c) Types of Disinformation

Finally, in order to make the types of disinformation clear and understandable, we use Claire Wardle and Hossein Derakhshan (2017) classification of information disorders which ranges from low manipulation to high manipulation intent:

- ◆◆ **Satire or Parody:** No intention to cause harm, but has the potential to fool.
- ◆◆ **False Connection:** Headlines, visuals, and captions don't support the content.
- ◆◆ **Misleading Content:** Misleading use of information to frame an issue or individual.
- ◆◆ **False Context:** Genuine content is shared with false contextual information.
- ◆◆ **Imposter Content:** Genuine sources are impersonated.
- ◆◆ **Manipulated Content:** Genuine information or imagery is manipulated to deceive.
- ◆◆ **Fabricated Content:** New Content is entirely false, designed to deceive and do harm.

Examples of each kind of disinformation disorder

Figure 1. Types of disinformation



Source: FirstDraft: <https://x.com/firstdraftnews/status/1406897519725056000>

Disinformation Bingo

Practical Activity 1 (OFFLINE)

Objective:

To reinforce the concepts of misinformation and fake news in a fun and engaging way.

Instructions:

1. Create Bingo Cards:
 - Distribute blank bingo cards to each student.
 - Have students fill in the squares with terms from the module, such as "clickbait," "conspiracy theory," "fact-checking," "emotional appeal," and "confirmation bias."
2. Call Out Clues:
 - The teacher or a designated student reads clues or statements related to misinformation.
 - For example: "A headline that is designed to shock or outrage."

Materials:

- Bingo cards with a variety of concepts all related to the module 1 (see Annex 1) .
- Markers or bingo chips.
- A list of clues or statements related to misinformation from the module.

3. Mark the Cards:

- Students mark the corresponding square on their bingo card if the clue matches a term on their card.

4. Winning the Game:

- The first student to mark five squares in a row (horizontally, vertically, or diagonally) calls out "Bingo!" and checks their answers with the teacher.

Disinformation Detectives

Practical Activity 2 (ONLINE)

The digital free activity can be accessed on: <https://wiseme.eu/module1-students-en/>

CARD 1

DISINFORMATION BINGO			
MISINFORMATION	DECEPTIVE HEADLINES	MAL-INFORMATION	
MESSAGE	BIAS	BOT ACCOUNTS	
OBJECTIVITY	HOAX	CLICKBAIT	
TRUSTWORTHY	ECHO CHAMBERS	AGENT	

CARD 2

DISINFORMATION BINGO			
FAKE NEWS	DISINFORMATION	AGENT	
FACT	CLICKBAIT	TRUSTWORTHY	
BIAS	MISLEADING VISUALS	INFODEMIC	
MAL-INFORMATION	SATIRE OR PARODY	MESSAGE	

CARD 3

DISINFORMATION BINGO			
COGNITIVE BIASES	CONSPIRACY THEORIES	EMOTIONAL MANIPULATION	
SATIRE OR PARODY	ECHO CHAMBERS	INFORMATION	
TRUSTWORTHY	OBJECTIVITY	AGENT	
MISINFORMATION	DECEPTIVE HEADLINES	MAL-INFORMATION	

CARD 4

DISINFORMATION BINGO			
MAL-INFORMATION	DECEPTIVE HEADLINES	ECHO CHAMBERS	
HOAX	DIGITAL LITERACY	FALSE CONNECTION	
FAKE NEWS	SATIRE OR PARODY	MESSAGE	
MANIPULATED CONTENT	BOT ACCOUNTS	INTERPRETER	

CARD 5

DISINFORMATION BINGO			
DISINFORMATION	EMOTIONAL MANIPULATION	MISINFORMATION	
MANIPULATED CONTENT	BOT ACCOUNTS	INTERPRETER	
CLICKBAIT	CONSPIRACY THEORIES	DIGITAL LITERACY	
HOAX	BIAS	FALSE CONNECTION	

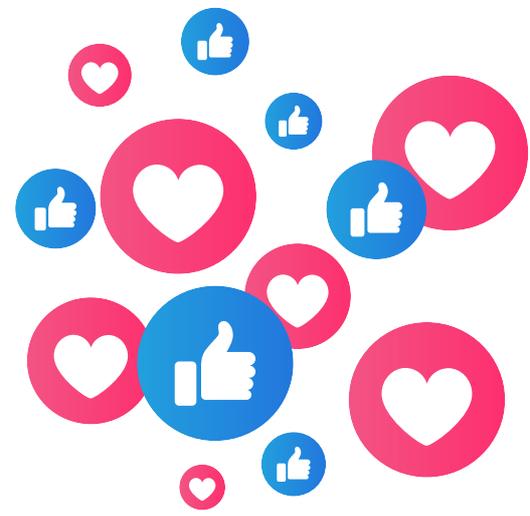
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MODULE 2: SOCIAL MEDIA AND INFORMATION CONSUMPTION



MODULE OVERVIEW

Social media plays a huge role in spreading information and has become one of the primary sources of news, especially among younger generations. Platforms like Instagram, TikTok, Twitter, and Facebook are often the first places young people turn to for current events, pop culture, and local happenings. However, this constant stream of information can sometimes include misleading or completely false content, which has a significant impact on young users' understanding of reality and the world around them.

This module is thus designed to provide some key points about how social media influences the spread of information and, specifically, fake news among young generations.

MODULE OBJECTIVES

Upon completion of this module students will be able to:

- ◆ Distinguish the different social media platforms and their main functions
 - ◆ Recognize bias and manipulation techniques
 - ◆ Analyze content critically rather than accepting it at face value
 - ◆ Act responsibly by verifying sources and questioning the intent behind content
 - ◆ Build a personalized set of trusted resources and tools that empower lifelong learning
- In general, learn how to use social media constructively while mitigating its negative impacts.

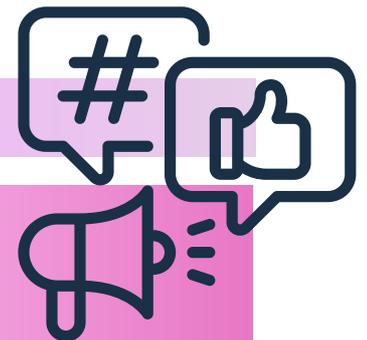
STRUCTURE OF THE MODULE

2.1: Social Media platforms and their influence

- ◆ Overview of popular social media platforms
- ◆ The role of algorithms in content consumption
- ◆ Behavioural effects of social media on students

2.2: Media Literacy and critical consumption

- ◆ Evaluating the credibility of sources: Building a personal learning environment (PLE).
- ◆ How to identify biased or manipulative content
- ◆ Tools and strategies for verifying the truthfulness of online content



2.1. SOCIAL MEDIA PLATFORMS AND THEIR INFLUENCE

Social media platforms, with their short, engaging content formats, indeed shape how young people think and interpret information. Short-form content encourages scrolling through lots of brief posts rather than engaging deeply with complex material, reducing the attention young people give to understanding the context of issues and can lead to surface-level thinking. Complicated social, political, or scientific topics are often boiled down to catchy sound bites or entertaining visuals, which may leave out essential nuances. This creates a distorted view where issues seem more black-and-white than they are, shaping young people’s understanding of complex matters. Content that goes viral is often emotionally charged, which can manipulate young people’s perspectives by playing to emotions rather than presenting factual information:

this can skew perspectives on issues, creating fear, outrage, or overconfidence in unverified “facts.”

By combining education, platform-based changes, and tools that encourage critical thinking, we can better equip young people to navigate social media with an informed, discerning mindset. Different platforms serve diverse purposes and demographics, influencing how people consume content, communicate, and interact online.

OVERVIEW OF POPULAR SOCIAL MEDIA PLATFORMS

TikTok	A short-form video platform where users create and share videos from 15 seconds to 10 minutes. Known for its algorithm-driven feed that serves up highly personalized content	Trending challenges, dance videos and meme culture / Creative editing tools, effects and music integration / "For you" page, powered by AI, driving discovery	Predominantly Gen Z and younger Millennials (ages 16-24) / Appeals to creators and viewers interested in entertainment, education, and trends.	Entertainment, personal branding, education through bite-sized content and viral marketing.
Instagram	A photo and video sharing platform with features like Stories, Reels, and shopping integration. It's a hub for visual storytelling and influencer culture	Stories (24-hour posts), reels (short videos) and carousels / Integrated shopping and brand promotion / Direct messages and live streaming	Broad appeal, but especially popular among Millennials and younger Gen Z / A strong presence of influencers, brands and small businesses	Lifestyle content, brand marketing, influencer campaigns and personal expression
YouTube	A video sharing platform that allows users to upload, watch, and comment on videos ranging from a few seconds to several hours. It is both a content hub and a search engine for videos	Long and short-form video content (YouTube Shorts)/ Monetization opportunities for creators through ads, memberships, and Super Chat/ Educational content, tutorials, entertainment, and music streaming	All age groups with a strong presence among Millennials and Gen Z / Both casual viewers and professional content creators	Entertainment, education, product reviews, tutorials and vlogging

Facebook	A social networking platform focused on connecting friends, families, and communities. It integrates text, photos, videos, and groups	News Feed, Groups, and Marketplace / Facebook Stories and Live Streaming / Business Tools for Ads, Event Promotion, and Ecommerce	Popular among older Millennials, Gen X, and Baby Boomers / Businesses and community organizations also use it extensively	Community engagement, business promotion, and personal updates
Twitter (not X)	A microblogging platform known for real-time updates, news, and public discourse. Posts (tweets) are limited in length but encourage quick, direct communication	Popular topics and hashtags for real-time updates / Ability to share text, images and videos / Spaces (audio chat rooms) and subscription services for premium content	Journalists, professionals, activists, and tech-savvy audiences / Strong among Millennials and Gen Z	News reporting, political discourse, customer service and public engagement
Snapchat	A multimedia messaging app that focuses on ephemeral content (disappears after being viewed). Known for its playful approach to communication	Snap Stories, direct messages and AR filters / Spotlight for short-form content and location-based features like Snap Map	Predominantly Gen Z (teens and young adults) / Used for casual communication and playful interaction.	Personal communication, casual sharing and exploration of AR experiences
LinkedIn	A professional networking platform for career development, industry connections and job searching	Professional profiles, posts and articles / Job postings, competency endorsements, and LinkedIn learning / Networking through connections and groups	Professionals, Recruiters, and Businesses / Popular among Millennials, Gen X, and older Gen Z entering the workforce	Professional networking, career development and industry insight
Pinterest	A visual discovery platform where users "pin" content like images, articles, and videos into themed boards for inspiration and planning	Pins and boards for organization / Shopping integration and content recommendations	Predominantly women, spanning Millennials to Gen Z / Popular with DIY enthusiasts, designers and planners	Creative inspiration, event planning and product discovery
Reddit	A community-driven platform organized into forums (subreddits) where users discuss topics, share news, and post content	Up/down vote system to prioritize popular content / Subreddits tailored to niche interests	Broad demographic appeal, but leans towards a younger audience (Gen Z and Millennials) / Known for its active, topic-focused communities	Community discussions, niche interests, and Q&A forums
WhatsApp	A messaging platform that supports text, voice, and video communication, as well as group chats	Encrypted messages for privacy / Voice and video calls, status updates and file sharing	Global user base spanning all age groups / Widely used for personal and business communication	Instant communication, customer service and community engagement

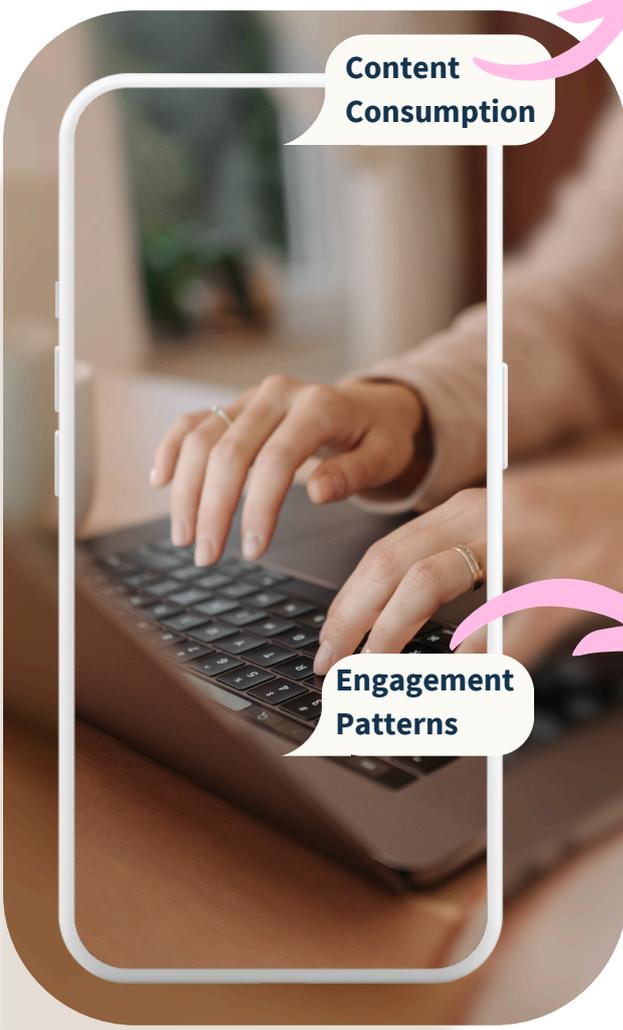
The role of algorithms in content consumption

Social media relies on an algorithm to determine what feed of content each user will receive. These are a set of coded software instructions that are used to evaluate inputs to come up with the best outputs. The inputs include the content to be posted, information on users' preferences and activity, advertiser requirements and platform goals on social media. The output is the feed of content that each user receives in real time.

Different priority settings are based on various algorithmic approaches used by various platforms. Facebook wants users to have 'meaningful social interaction' with friends and families. TikTok's assertive algorithms promptly seek to understand users' interests and provide them with captivating videos. YouTube must control suggestions to assist content providers in reaching customers to ensure people remain interested in the videos.

Regardless of the strategy used, the companies protect the operations of their algorithms from the public to avoid revealing their advantages. However, there is one similarity, which is the desire to increase the user's engagement, as the calculated stimuli are intended to attract the viewers' attention.

Catapulted by powerful algorithms, social media has begun transforming user behavior in profound ways across two key areas:



Content Consumption

Feeds offer content that is likely to appeal to each user and encourage interaction through likes, shares, and comments. Users are more inclined to engage with posts that are emotional, provocative, and those espousing their own beliefs. In the long run, users become entrenched in filter bubbles and echo chambers. That is, they only get information from sources with similar political leanings, thus promulgating particular stories. This weak point of the leverage algorithms has on the user worldviews has negative social implications.

Engagement Patterns

The fact that the algorithms for curation allow for individualization in recommendations has revolutionized the ways in which users engage with content. Where social interactions were once a government statistic, today's consumers in the US, for instance, spend nearly three hours on social media daily and open platforms more than 200 times a week. The race created by the algorithms for engagement results in designs that are deliberately made to increase the daily visits of the user and its addictive intrinsic rewards with notifications, validation, and feedback in the form of quantifiable likes and shares.

Behavioral effects of social media on students

Social media has significant behavioral effects on students aged 12 to 17, as this age group is in a critical stage of emotional, social, and cognitive development. Effects can be both positive and negative.

Positive Behavioral Effects



Improved Communication Skills

Social media helps students develop digital communication skills, enabling them to connect and collaborate with peers. Platforms like WhatsApp or Instagram enable them to maintain friendships, even across long distances.



Enhanced Self Expression

Social media provides a space for young people to express themselves creatively, whether through writing, art, or multimedia content. Platforms like TikTok and YouTube empower students to share their talents and hobbies.



Access to Support Networks

Students can join groups or communities that provide emotional support and information on shared interests or struggles (e.g., mental health forums on Reddit or Facebook groups). Social media can help marginalized students find acceptance and solidarity.



Educational Opportunities

Platforms like YouTube, Pinterest, and even Instagram provide access to educational content, tutorials, and study tips, helping students learn beyond the classroom. Students can follow influencers or content creators who promote positive habits, such as studying, fitness, or volunteer work.

Behavioral effects of social media on students

Social media has significant behavioral effects on students aged 12 to 17, as this age group is in a critical stage of emotional, social, and cognitive development. Effects can be both positive and negative.

Negative Behavioral Effects



Increased Anxiety and Depression

Cause: constant comparison to peers and influencers can lead to feelings of inadequacy, low self-esteem, and body image issues / Effect: the fear of missing out (FOMO) can heighten stress and cause anxiety about being left out of social events or trends.



Cyberbullying

Cause: social media makes it easier for bullying to occur anonymously and reach a wider audience. Effect: victims of cyberbullying may experience emotional distress, academic difficulties, and even withdrawal from social activities.



Addiction and Distraction

Cause: algorithms are designed to keep users engaged, leading to excessive screen time. Effect: students may struggle to focus on schoolwork, physical activities, and face-to-face relationships due to overuse of social media.



Distorted Reality and Expectations

Cause: exposure to curated, idealized portrayals of others' lives (vacations, achievements, appearances) on platforms like Instagram or TikTok. Effect: students may develop unrealistic expectations about success, relationships, or appearance, leading to dissatisfaction with their own lives.



Reduced Interpersonal Skills

Cause: over-reliance on online communication instead of face-to-face interactions. Effect: students may find it harder to navigate real-world social settings, impacting their ability to form deeper connections.



Privacy and Safety Concerns

Cause: sharing personal information online without understanding the risks. Effect: students may face risks such as identity theft, online grooming, or unauthorized use of their data.

2.2. MEDIA LITERACY AND CRITICAL CONSUMPTION

Media literacy is indeed a crucial concept in this context. Media literacy is the ability to access, analyze, evaluate, create, and act upon media in all its forms. It empowers individuals to interpret the messages they encounter in the media, understand the motives behind them, and make informed decisions about how to respond. Media literacy includes understanding both the content (what is being said) and the context (who is saying it, and why), as well as the ability to identify biases, stereotypes, and misinformation. To promote a real critical consumption it is essential to teach students to recognize manipulative content, understand algorithms, and evaluate the credibility of information.

Evaluating the credibility of sources: Building a Personal Learning Environment

A Personal Learning Environment (PLE) is a system that allows learners to take control of and manage their own learning process. It is a concept that has gained popularity in the field of education due to the increasing use of technology and the shift towards more personalized learning experiences. A PLE typically consists of 4 key components: Content, Tools Connections and Activities [see the diagram for details]. Teaching young students to evaluate the credibility of sources is essential for helping them build a robust Personal Learning Environment (PLE), here intended as a self-directed ecosystem of tools, resources, and practices that support their learning goals. Some specific actions can reach this goal:

Content: the resources and materials that learners use to acquire knowledge and information. Content can be in various forms such as text, videos, audio, and interactive simulations

Tools: the applications and software that learners use to interact with the content and engage in learning activities. These tools can include learning management systems, social media platforms, online collaboration tools, and productivity apps

Activities: Activities are the tasks and exercises that learners engage in to apply their knowledge, practice skills, and demonstrate their understanding. These activities can be individual or collaborative and can take place both online and offline

Connections: refer to the networks and relationships that learners establish with peers, instructors, experts, and other resources. These connections play a crucial role in supporting collaborative learning and knowledge sharing

Teach the Basics of Source Credibility

Key Criteria for Evaluating Sources are **Authority** (Who created the content? Are they an expert or qualified on the topic?), **Accuracy** (Is the information backed by evidence, references, or reputable sources?), **Bias** (Is the source impartial, or does it have an agenda?) **Relevance** (Is the information aligned with the student's learning goals or research topic?) and **Currency** (Is the information up-to-date?)

Activity: provide examples of credible vs. non-credible sources and discuss why one is more trustworthy.

Encourage Use of Trusted Educational Tools

Introduce students to platforms like: **Google Scholar** (for academic papers and research), Khan **Academy** or **EdX** (for free courses on a variety of topics) and **Fact-Checking Websites** (such as Snopes, FactCheck.org, or PolitiFact).

Activity: have students practice searching for credible sources on a topic using these tools and present their findings.

SIFT stands for

1. Stop - pause and think before trusting or sharing information
2. Investigate the source: research the publisher or creator of the content
3. Find better coverage: look for the same information in more credible or authoritative sources
4. Trace claims: follow links and citations back to the original context or evidence.

Activity: provide students with a dubious article or social media post and ask them to apply the SIFT method to evaluate its credibility.

Teach the SIFT Method

Create a Personal Information Audit

Have students reflect on their current sources of information: where do they get news and educational content (e.g., Instagram, YouTube, school websites)? Are these sources reliable?

Activity: students map their existing information habits and identify areas where they could add credible sources, such as academic databases or reliable news outlets.

Teach students to incorporate reliable tools into their daily learning: RSS Feeds and News Aggregators (set up feeds like Feedly to gather news from credible outlets); Bookmarking and Note-Taking Tools (use platforms like Pocket or Notion to organize and store high-quality resources); Collaborative Tools (introduce apps like Padlet or Trello for managing projects and sharing resources).

Activity: guide students through setting up their PLE using a mix of tools and sources tailored to their learning goals.

Build a Digital Toolkit for a PLE

Evaluate Real-Life Scenarios

Activity: give students a research topic (e.g., climate change or historical events); ask them to search online, evaluate sources using the SIFT method, and build a resource list for their Personal Learning Environment; have them explain why they included each source in their PLE.

Encourage students to regularly reflect on their PLE: What's working? What needs improvement? Are they using diverse and up-to-date sources?

Activity: have students journal about their learning journey and how they can improve their source evaluation and PLE over time.

Promote Reflection and Iteration

Evaluating the credibility of sources: Building a Personal Learning Environment

Teaching young students to identify biased or manipulative content is critical for their ability to navigate media responsibly. First of all it is necessary to start with the definitions:

Bias

content that shows preference or prejudice toward one side of an issue, often committing counterarguments or presenting them unfairly.

Manipulation

content crafted to influence opinions or behavior by distorting facts, using emotional appeals, or other deceptive techniques.

Common Types of Bias are:

Framing Bias

highlighting certain aspects of a story while downplaying others.

Selection Bias

choosing only evidence or examples that support a particular viewpoint.

Confirmation Bias

seeking or interpreting information that confirms pre-existing beliefs

Common Types of Manipulation are:

Emotional Appeals

using fear, anger, or sympathy to sway opinions.

Clickbait

sensationalized headlines designed to attract clicks rather than provide accurate information.

Cherry-Picking Data

presenting statistics selectively to mislead.

A first task then is to develop analytical skills with guiding questions such as:

- ◆ Who created the content? Is the author credible or qualified to speak on the topic?
- ◆ What is the purpose? Is it to inform, persuade, entertain, or provoke?
- ◆ Is the content balanced? Does it present multiple perspectives or favor one side?
- ◆ How is the language used? Look for emotionally charged words or exaggerations.
- ◆ Are sources cited? Are claims supported by reputable evidence or data?

A second step is to teach Media Literacy basic concepts:

- ◆ Fact vs. Opinion: help students differentiate between factual statements and subjective pinions.
- ◆ Agenda Setting: explain how media can shape what we think about by choosing which stories to cover.
- ◆ Echo Chambers: show how algorithms reinforce existing beliefs by limiting exposure to diverse viewpoints.

Then it is surely useful to introduce Tools for Fact-Checking and Bias Detection such as:

- ◆ Fact-Checking Websites: introduce platforms like Snopes, PolitiFact, or FactCheck.org.
- ◆ Bias-Checking Tools: use resources like AllSides (for media bias ratings) or Media Bias/Fact Check.
- ◆ Reverse Image Search: teach them how to verify the origin of images with tools like Google Lens or TinEye.

Moreover, the following practices surely lead to a more responsible use of the information:

- ◆ Encourage Reflection and Discussion: host open discussions where students share examples of biased or manipulative content they've encountered. Discuss how they felt about the content and whether they initially believed it.
- ◆ Promote Responsible Sharing Practices: teach the "Think Before You Share" rule (is the source credible? Is the information verified? Could sharing this cause harm or spread misinformation?)
- ◆ Analyze Real-Life Examples using a case study: analyze a viral post or video for elements of bias or manipulation, e.g. a political ad or a trending news clip on social media. Discuss the impact of misinformation or one-sided reporting in shaping public perception.



Fact-Checking Websites

01

- **Snopes:** investigates rumors, urban legends, and viral claims.
- **PolitiFact:** focuses on political claims and rates them on a "Truth-O-Meter."
- **FactCheck.org:** nonpartisan checks on statements by public figures.
- **AFP Fact Check:** specializes in debunking misinformation globally.

Source Bias and Reliability Checkers

03

- **AllSides:** shows media bias ratings and presents news from multiple perspectives.
- **Media Bias/Fact Check:** rates the political bias and factual reliability of news outlets.

Social Media Fact-Check Features

05

- Platforms like Facebook and Twitter have built-in fact-checking labels or partner with organizations to flag false information.

02

Image Verification Tools

- **Google Reverse Image Search:** find the original source of an image or detect manipulated visuals.
- **TinEye:** reverse image search with detailed metadata.
- **InVID & WeVerify:** browser plugins for verifying videos and images shared online.

04

URL and Website Validators

- **Whois Lookup:** provides ownership information about websites to verify credibility.
- **Wayback Machine:** access historical versions of web pages to check for edits or suspicious activity.

Objective

Teach students how to critically evaluate the credibility of online content:

- Develop their skills in identifying false or misleading information
- Familiarize students with fact-checking tools and techniques
- Encourage responsible sharing practices on social media.

Required Tools and Materials

1. Digital Tools (access to computers, tablets, or smartphones with internet connectivity)
 - Fact-checking websites (e.g., Snopes, FactCheck.org, PolitiFact)
 - Reverse image search tools (e.g., Google Images, TinEye)
 - Media bias and reliability checkers (e.g., AllSides, Media Bias/Fact Check)



Contents

- Understanding what constitutes credible information
- Exploring fact-checking tools and their applications
- Practical application of fact-checking strategies on a real-world example

2. Printed Materials:

- Worksheets for note-taking
- A curated set of viral claims (real and fabricated) for analysis

3. Whiteboard/projector for group discussions and demonstrations.

Activities

Step 1: Introduction (15 minutes)

Objective: establish foundational knowledge about fact-checking

- ◆◆ Briefly explain what fact-checking is and why it is important
- ◆◆ Use an example of a viral claim (e.g., a popular meme or news story) to illustrate how misinformation spreads
- ◆◆ Discuss the consequences of sharing false information

Interactive Question: have you ever shared something online that turned out to be false? How did it feel?

Step 2: Familiarize Students with Tools (20 minutes)

Objective: equip students with knowledge of fact-checking tools

Demonstrate how to use:

- ◆◆ Snopes or similar platforms to investigate the credibility of claims
- ◆◆ Google Reverse Image Search to verify the source of an image
- ◆◆ AllSides to check for bias in news reporting

Show students how to identify credible sources by looking for:

- ◆◆ Author credentials
- ◆◆ Reputable organizations
- ◆◆ Evidence and citations

Hands-On Activity: practice using one tool with a simple example (e.g., searching if “Humans only use 10% of their brain” is true or false).

Step 3: Group Fact-Checking Challenge (30 minutes)

Objective: allow students to apply their knowledge in a collaborative setting

- ◆◆ Divide students into small groups (3-4 per group)
- ◆◆ Assign each group one viral claim to investigate.
Examples: a sensational headline (“Aliens Discovered on Mars!”) / A widely circulated image (“Sharks swimming on a flooded highway”) / A controversial political statement
- ◆◆ Both claims to be investigated and the tools to be used have to be different for each group
- ◆◆ Provide each group with a worksheet to document their process:
 - 1.Claim: write down the claim they’re analyzing
 - 2.Source Check: investigate the website or person sharing the claim
 - 3.Checking Tools: use Snopes, reverse search, etc., to verify the claim
 - 4.Conclusion: determine if the claim is true, false, or misleading

Expected Outcome: groups should provide a reasoned explanation for their conclusion.

Wrap-Up Tips:

- ◆◆ Emphasize the importance of stopping and thinking before sharing content
- ◆◆ Encourage students to share fact-checking tips with family and friends.

Step 4: Group Presentations (20 minutes)

Objective: share findings and reinforce learning.

- ◆◆ Each group presents their assigned claim, their fact-checking process, and their conclusion
- ◆◆ Encourage other groups to ask questions or add observations
- ◆◆ Highlight strong examples of critical thinking and teamwork

Step 5: Reflection and Discussion (15 minutes)

Objective: reinforce lessons and discuss broader implications

Discussion Prompts:

- ◆◆ “What was the most surprising thing you learned during this activity?”
- ◆◆ “How can you apply these skills in your everyday life?”
- ◆◆ “What should you do if you’re unsure whether something is true?”

Assessment and Follow-Up

- ◆◆ Collect and review worksheets to assess understanding of the fact-checking process
- ◆◆ Assign homework: students choose a viral post or news article at home and fact-check it using the tools they learned
- ◆◆ Follow up with a class discussion on their findings.

Spot and Draw: Detecting Bias and Manipulation

Practical Activity 2 (OFFLINE)

Objective

- Familiarize students with key terms related to biased or manipulative content
- Reinforce understanding of these terms through a fun, interactive word search
- Encourage creativity by allowing students to illustrate their understanding of bias detection

Contents

- This activity not only reinforces vocabulary and critical thinking skills but also engages students in a creative way to visualize the concepts, making them more memorable and meaningful
- The learners' task is to find and select the words in the grid. The words may be arranged horizontally, vertically, diagonally, or backward.

Activities

These are the terms directly related to identifying biased or manipulative contents to be detected:

1. Bias
2. Manipulation
3. Misinformation
4. Source
5. Credibility
6. Fact
7. Opinion
8. Headline
9. Context
10. Verify
11. Clickbait
12. Stereotype
13. Emotion
14. Framing
15. Agenda

Here's a sample grid layout for reference:

```
BIASETOPINION
AGENDAXVERIFY
MANIPULATION
IMISINFORMATI
SCREDIBILITYO
HLCLICKBAITTN
EOSTEREOTYPET
ANOCONTEXTKEI
DEMOTIONALSES
```

The digital free activity can be accessed on: <https://wiseme.eu/module2-students-en/>

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MODULE 2: SOCIAL MEDIA AND INFORMATION CONSUMPTION

- **The Shaping of Social Media Algorithms on User Behavior - Encyclopedia Platform -** <https://encyclopedia.pub/entry/57094>
- **Personal Learning Environment (PLE) Explained – Learning Corner -** https://learningcorner.co/knowledge-base/glossary/personal-learning-environment#google_vignette
- **Google Scholar:** <https://scholar.google.com/>
- **Snopes:** <https://www.snopes.com/fact-check/>
- **FactCheck.org:** <https://www.factcheck.org/>
- **PolitiFact:** <https://www.politifact.com/>
- **Google Reverse Image Search:** <https://images.google.com/>
- **TinEye:** <https://tineye.com/>
- **InVID:** <https://www.invid-project.eu/>
- **AllSides:** <https://www.allsides.com/unbiased-balanced-news>
- **Media Bias/Fact Check:** <https://mediabiasfactcheck.com/>
- **Whois Lookup:** <https://whois.domaintools.com/>
- **Wayback Machine:** <https://web.archive.org/>



MODULE 3: PSYCHOLOGICAL AND EMOTIONAL REACTIONS TO MISINFORMATION

MODULE OVERVIEW



This module aims to equip teachers with the knowledge and strategies to help students aged 12-17 understand and navigate the complexities of emotional aspects when using social media. We will explore cognitive biases, manipulative techniques such as labelling, and the importance of mindfulness in fostering emotional resilience in the digital age. Key topics include the significance of self and social awareness, responsible decision-making, and relationship skills within the framework of social-emotional learning (SEL). By integrating these concepts, teachers will be better prepared to guide students in developing critical thinking skills, emotional intelligence, and a responsible approach to social media use, ultimately promoting a more informed and empathetic generation.

MODULE OBJECTIVES

Upon completion of this module, students will be able to:

- ◆ Identify and understand cognitive biases influencing perception of information we encounter on social media
- ◆ Recognize commonly used manipulative techniques used to spread false news
- ◆ Understand how habits influence our activities on social media
- ◆ Develop self and social awareness skills to deal responsibly with social media content



STRUCTURE OF THE MODULE

3.1: Understanding the emotional impact of misinformation

- ◆ The psychology of misinformation: why people believe and share false news
- ◆ The role of cognitive biases in accepting and spreading false information
- ◆ How manipulative techniques trigger emotional responses (fear, anger, anxiety) and lead to rationalization to mislead us

3.2: Building emotional resilience against misinformation

- ◆ Strategies to manage emotional reactions to misinformation
- ◆ Mindfulness and critical thinking: slowing down reactions to emotionally charged content
- ◆ Social Emotional Learning (SEL) - teaching students emotional intelligence in the digital sphere



3.1. UNDERSTANDING THE EMOTIONAL IMPACT OF MISINFORMATION

In exploring the vulnerability of individuals to believe and share misinformation, it is essential to recognize the role of media—historically and in the contemporary digital landscape. We can see the role of media in spreading misinformation in the history on the example of the press. It is well documented (Doten-Snitker et al., 2024) how the new communication technologies (like printing) can accelerate spreading the misinformation. During the witch hunts of the 15th to 17th centuries, the proliferation of printed pamphlets and pamphlets amplified baseless accusations, creating an atmosphere of fear and hysteria that led to widespread persecution. In the same way today, social media has accelerated this process, allowing misinformation to spread rapidly and reach vast audiences, often without critical scrutiny.



Title page from a 1669 edition of the *Malleus maleficarum*, a handbook on witchcraft originally published in 1487.

Concerning our increased ability to share with the existence of social media, the research shows (Soroush et al., 2028) that:

- ◆ The “falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information”.
- ◆ The “false news was more novel than true news, which suggests that people were more likely to share novel information. Whereas false stories inspired fear, disgust, and surprise in replies, true stories inspired anticipation, sadness, joy, and trust”.

The researchers would conclude that the “false news spreads farther, faster, deeper, and more broadly than the truth because humans are more likely to spread it”.

Why are people vulnerable to believe and share false news and narratives could be attributed to the following aspects or our perception of information and cognition:

1. **Confirmation Bias:** People tend to favour information that confirms their existing beliefs.
2. **Repetition Effect:** Repeated exposure to information increases its perceived truthfulness (closely connected to the representativeness and availability biases).
3. **Emotional Appeal:** Misinformation often triggers strong emotions, making it more memorable and likely to be shared. Emotional appeal is often part of manipulation used to affect the listener perception.
4. **Rationalization:** Justifying our behaviour or an attitude with logical reasons, even if these are not appropriate. Rationalization is often used as manipulative technique to mislead the recipient of the information.
5. **Social Proof:** Seeing others believe or share something can reinforce its perceived validity and is closely related to Confirmation bias (sense of belonging).
6. **Cognitive Overload:** In a fast-paced digital environment, people may not have the capacity to critically evaluate every piece of information. Our lack of time or just not willing to invest the effort to check the information provided (see the Module 2 and 5 for more detail on fact-checking).
7. **Manipulative techniques:** The acceptance of disinformation is promoted by the use of manipulative techniques that are designed to abuse our basic cognitive functions and exploit our biases through emotional and rationalization manipulation. These could be used consciously or unconsciously.
8. **Habit of sharing information:** Our behaviour on social media is, to a large extent, influenced by our habitual patterns. “Once habits form, perception of context cues automatically brings the practised response to mind, and people respond with limited sensitivity to outcomes such as misleading others or acting contrary to personal beliefs” (Ceylan et al., 2023).

In the following chapters, we will take a closer look at the aspects that we can address with students in the class, namely the cognitive biases, the manipulative techniques used and the role of habits.

The role of cognitive biases in believing and sharing false news

During evolution, we have been equipped to survive in a very complex environment with a need to make quick decisions to catch the prey or to avoid danger. This need to make quick decisions equipped us with the ability to interpret perceived information based on:

- ◆ our experience, the information we already possess,
- ◆ our emotional response (e.g. fear means to run; desire or excitement leading to attraction or willingness to do something).

This response was built into us very strongly as it is directly connected to our survival. And as we could survive only as a part of a social group and we would not survive as an individual, we have also learned how to act and behave to be accepted in the group. In this way, we tend to develop our perception of our own identity and need to belong, as individuals often define themselves through group affiliations that provide a sense of security and acceptance. All these still strongly influence our perception of information, leading us to “make shortcuts” and interpret and often distort the information in a way that supports our own perception of identity. These errors are called cognitive biases.

A cognitive bias is a subconscious error that leads us to misinterpret information we perceive, and thus affects the accuracy and relevance of our decisions and action.

It is important to understand that cognitive bias is not a logical fallacy. Logical fallacy represents an error in logical argument. However, cognitive bias is influencing our perception and interpretation of the information itself.

Cognitive bias influences WHAT information we perceive and HOW we interpret the information we have perceived.

Among the most important cognitive biases that are influencing our perception of information and how we act on social media (what we share) are the following biases (ACTIVE Toolkit, see Other sources):



◆ **Confirmation Bias** is a tendency for people to favor information that confirms their preconceptions. Basically, it is about receiving and interpreting information that supports one's position on an issue. It allows us to conclude that our views are correct but may often obscure reality as we do not see things as they are but as we want them to be. Confirmation bias leads us to receive, perceive and interpret information in a way that is confirming our “current selves” (our beliefs, our conceptions of the topic, our mental models, our desires, our status, our behavior, our likes, our attitude etc.).

Confirmation bias plays a very strong role in the way people interact and are influenced by social media. The confirmation bias is making us to:

- ◆ **LOOK UP** mainly/only information confirming our viewpoint (selective exposure).
- ◆ **PERCEIVE** information in a way that confirms our point of view (people, thanks to confirmation bias, hear only some parts of the story/information presented and ignore the parts that do not fit our conception). This aspect is crucial to understanding that confirmation bias distorts what we actually see (perceive) and, hence, the information we are getting and remembering.
- ◆ **INTERPRET** information to favor our point of view. Neglecting or relativizing the information contradicting our point of view or rationalize the explanation to support our point of view.



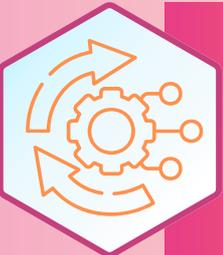
Representativeness bias

is the tendency to judge the truthfulness of information by the amount of available data that resembles it. In this way, repeated exposure to information increases its perceived truthfulness.



Availability bias

is that we are influenced by information that is readily available to us. As a result, we often forget that we may not have enough relevant information to make a relevant judgment.



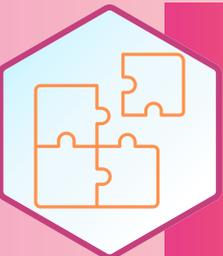
Projection bias

is the implicit assumption that others think, believe, or know the same as we do. It is about not recognising others as individuals with their own personalities, values, and beliefs. Projection bias is basically a perception where we make from our current self a universal norm how we see and judge the others.



Correspondence bias (or fundamental attribution error)

is the tendency to attribute a person's behavior to their personality rather than to situational factors. Mostly, it serves as a projection of our attitude toward the person to interpret the given situation. For example, if we do not like someone, we may see everything he/she does as insidious or intended to harm us.



Blind spot bias

is when we recognize bias in others but fail to see it in your selves. We tend to think that we are less likely to be biased than others (for more about blind spot bias see: [Researchers Find Everyone Has a Bias Blind Spot](#)).

Unfortunately, the above biases are strongly supported by social media algorithms, which are designed to present us with only the information we are already in favour of, thus directly supporting our confirmation, representativeness and availability biases. In this way, social media promotes so-called "echo chambers" and reinforces misinformed beliefs.

Projection, correspondence and blind spot biases then reinforce our confirmation bias and lead us to attribute meaning to the information we perceive, which can make us angry, furious and lead us to reject or hate others. Or, on the other hand, to be positively inclined towards someone who actually has no good intentions.

As research shows (Hart et al., 2009) motivations to defend our point of view (confirmation bias) is stronger with:

- ◆ value-relevant involvement, when I feel attachment or loyalty to the point of view
- ◆ challenging (vs. supporting) information makes people get into defensive state
- ◆ apparently high-quality information that supports their point of view
- ◆ sacrificing for the view by personal commitment (e.g. making public proclamation)
- ◆ dedicating time and effort to get the knowledge and opinion about the topic so far
- ◆ closed-minded individuals

As the above suggests, it is often very difficult for people to let go of their perceived 'truth' about the issue, as it often means admitting that a lot of effort has been wasted, and also having to disassociate myself from what I have strongly identified with. In this sense it is important to understand that we do not deal with just a rational opinion about something but that we deal with something that is strongly connected to our perception of our self (our identity)

The role of manipulative techniques in believing and sharing false news

Manipulative techniques play a key role in the success of spreading disinformation and fake-news through the social media. Manipulative techniques are designed to abuse our basic cognitive functions and to exploit our biases through emotional and rationalization manipulation.

Based on research we can describe the main following manipulative techniques to be used to promote disinformation and fake-news:

- Emotional language: Emotions are powerful tools of persuasion. Research shows that using emotional words and images, especially ones that evoke negative emotions such as fear or outrage, increases the viral potential of social media content.
 - False Dilemma (False Dichotomies): A false dilemma (or false dichotomy) is a logical fallacy that presents a limited number of options as if they are mutually exclusive, thereby dismissing other possibilities. In this way, the narrator wants to deceive you into believing there is no other alternative, even though more choices exist.
 - An example of a false dilemma would be saying: "You either support our environmental policies, or you don't care about the planet." This statement presents only two options: supporting the policies or being uncaring. In reality, there are other possibilities, such as supporting some policies but not others, suggesting alternative solutions, or caring about the environment without agreeing with the proposed policies. This oversimplification ignores the complexity of opinions and choices.
 - Incoherence: Incoherence occurs when someone uses two or more arguments to make a point that cannot logically all be true at once. It is used by conspiracy theory propagators who often base the conspiracy on some real phenomena but then add sinister motives or hidden causes working behind to explain complex phenomena in a simplistic way.
 - Scapegoating (Blame-shifting): Blame shifting (or scapegoating) is a powerful and commonly used manipulative technique. It refers to placing the blame for problems or undesirable outcomes on a particular individual or group in order to divert attention from the real issues or to deflect responsibility. This technique creates a false impression and rallies others against the scapegoat.
1. **Example:** An extreme example of blame-shifting (scapegoating) would be the Nazi approach to blaming and scapegoating, particularly towards Jews. This serves as a historical example of a manipulative technique used to foster division and hatred. By portraying Jews as the source of societal problems—such as economic hardship or political instability—the Nazis dehumanized this group and shifted public frustration away from the regime's failures. This scapegoating strategy not only unified their followers through a common enemy but also justified discriminatory policies and violence. This serves as a critical lesson in understanding how misinformation and emotional manipulation can lead to harmful ideologies and actions. Unfortunately, we can see similar tendencies used by today's politicians (e.g. blaming emigrants, blaming the EU Green Deal, etc.).
 2. **Example** from school environment: Blaming someone when a team receives a poor grade in a school project, saying, "It's all your fault we failed! You didn't do any work!" In this scenario, the blaming student is using the other team member as a scapegoat to deflect responsibility from the entire group. Instead of acknowledging that the project was a team effort and that everyone shared some responsibility, the blame is unfairly placed on one person. This oversimplifies the situation and avoids addressing the real issues.



Ad Hominem Attacks:

An ad hominem attack occurs when someone responds to an argument by attacking the character or personal traits of the individual making the argument rather than addressing the argument itself. This technique is often used to divert attention away from the actual issue and focus instead on the person, undermining their credibility without engaging with their points.



Labelling:

Labeling is often used to foster ad hominem attacks and scapegoating. It is a manipulative technique that involves tagging individuals or groups with negative or misleading labels to influence perception and behavior. This tactic simplifies complex issues by reducing people to a single characteristic or stereotype, making it easier to dismiss, dehumanize, or justify negative actions against them.

An example is labelling individuals or a group as “radicals”, “extremists”, “alarmists”, or “trolls” or “haters” without considering their viewpoint and evidence provided. Or calling a student “the shy one” can pigeonhole them and affect how others perceive and interact with them.



Fake expert:

A fake expert is someone portrayed as an authority in a specific field (e.g., a doctor or scientist) but who either does not exist or lacks genuine expertise. It's important to verify the credibility of any presented 'expert' to ensure they have the qualifications and experience they claim. Therefore we should always question the legitimacy of the presented authority when evaluating information.

The role of habits in spreading false news

Habits play a significant role in the sharing attack of false news on social media by influencing how individuals engage with content. When users develop the routine of quickly scrolling through their feeds, they may impulsively share articles or posts without verifying their accuracy. This habitual behavior is often driven by manipulative content in combination with the users biases that trigger emotional a rationalization responses leading users to prioritize speed and engagement over critical evaluation of the information.

Social media algorithms reinforce these habits by promoting sensational or popular content, creating a cycle in which false news can spread rapidly. The users are also directly motivated to share sensational content to gain likes and view valued by the social media. Over time, these habits establish patterns of misinformation sharing, making it harder for individuals to discern credible sources from misleading ones.

Negative psychological impacts of using social media for teenagers

Psychological impacts and potential risks associated with using TikTok and other social media, particularly for teenagers:

1

Addiction and Compulsive Use:

The platform's design encourages continuous scrolling, which can lead to excessive use and difficulty disengaging.

3

Body Image Issues:

Exposure to curated and edited content can lead to negative body image and self-esteem problems, as teens compare themselves to idealized representations.

5

Fear of Missing Out (FOMO):

Seeing others' highlights can create anxiety about missing out on experiences or not measuring up socially.

7

Social Pressure:

The desire to gain likes and followers can push teens to engage in risky or inappropriate behavior for validation.

9

Influence of Trends:

Teens may feel pressured to participate in viral trends, some of which may be dangerous or inappropriate.

2

Diminished Attention Span:

Rapid, short-form content may contribute to reduced attention spans and difficulty focusing on longer tasks.

4

Cyberbullying and Harassment:

Teens may encounter bullying or negative comments, which can affect mental health and emotional well-being.

6

Privacy Concerns:

Sharing personal information and content can lead to privacy breaches and unintended exposure.

8

Desensitization:

Repeated exposure to sensational or harmful content may lead to desensitization or normalization of certain behaviors.

10

Sleep Disruption:

Late-night use and bright screens can interfere with sleep patterns, affecting overall health and academic performance.

Understanding these risks can help teachers and parents guide teens towards healthier social media habits.

3.2. BUILDING EMOTIONAL RESILIENCE AGAINST MISINFORMATION

Strategies to manage emotional reactions to misinformation

How we respond to the information we encounter on social media is to a great extent influenced by **our ability to overcome our biases and to avoid manipulation** that we are exposed to on-line (by manipulative techniques) or offline (e.g. peer pressure). This ability is influenced by our ability to act consciously.

Acting consciously means understanding yourself, your situation (including others involved), and the possible consequences of your actions. This we can call **responsible decision-making**.

Therefore, to promote resilience against disinformation and encourage responsible behaviour among students, we should implement techniques that **enhance emotional intelligence and mindfulness**, and promoting responsible actions in social media context.

**Don't react
respond
consciously**

Emotional Awareness: refers specifically to the ability to recognize and understand one's own emotions and the emotions of others. It involves being aware of how feelings influence thoughts and behaviours, allowing individuals to better navigate their emotional experiences.

Emotional Intelligence: broader concept encompasses emotional awareness along with the ability to manage emotions, regulate emotional responses, empathize with others, and navigate social complexities. Emotional Intelligence includes skills like emotional regulation, social awareness, and relationship management.

Mindfulness is the practice of being fully present and engaged in the current moment without judgment. It involves paying attention to thoughts, feelings, bodily sensations, and the surrounding environment with an open and accepting attitude. Mindfulness practice is an effective tool for developing conscious responses to upcoming situations and promoting responsible actions in social media context.



Social Emotional Learning (SEL)

Social-emotional learning (SEL) is a well-designed approach for conceptualising and developing skills for emotional awareness, empathy, and conscious decision-making.

SEL consists of five main components:

SELF-AWARENESS:

Self-awareness involves recognizing and understanding one's own emotions, strengths, weaknesses, and values. It allows individuals to reflect on their thoughts and feelings, fostering personal insight.

Relevance and application for students in the context of social media:

- **Emotional Triggers:** Enables students to recognise their emotional responses to social media content.
- **Online Behavior:** Students can reflect on their online actions to align with their values.
- **Self-Image:** Helps students critically assess how social media influences their self-esteem and self-perception, allowing them to distinguish between authentic self-image and their identity on social media.
- **Peer Influence:** Students can identify how peer pressure affects their social media choices, enabling them to make more conscious decisions.
- **Empathy:** Students become more attuned to their emotions, which can enhance their ability to empathise with others.
- **Mindfulness Practices:** Incorporating mindfulness techniques helps them stay focused and calm while using social media.

01.

SOCIAL AWARENESS:

Social awareness is the ability to empathize with others and understand social dynamics and cultural contexts. It involves recognizing social cues, diverse perspectives, and the needs of others. Teachers can enhance social awareness by incorporating activities that promote empathy, such as discussions on diverse cultures and community involvement projects that encourage students to consider the viewpoints of others.

Relevance and application for students in the context of social media:

- **Diverse Perspectives:** Students learn to appreciate different viewpoints and backgrounds represented on social media.
- **Empathy:** Increased empathy leads to more respectful online communication. It helps reduce cyberbullying and promote kindness.
- **Social Cues:** Recognizing social cues improves understanding the context and emotional tone behind posts and comments, which can inform more thoughtful responses.
- **Media Representation:** Students can critically assess how different groups are portrayed on social media, fostering a deeper understanding of stereotypes and can identify scapegoating manipulation.
- **Social Issues:** Socially aware students are more likely to engage in discussions about social justice and current events.
- **Supportive Communities:** Awareness encourages students to contribute positively, fostering a sense of belonging and support among peers.
- **Online Relationships:** Understanding social dynamics promotes healthy interactions in digital spaces.

02.



03.

SELF-MANAGEMENT:

Self-management entails the ability to regulate emotions, set goals, and maintain motivation despite challenges. It involves developing coping strategies and resilience. Teachers can foster self-management by teaching time management skills, stress-reduction techniques, and goal-setting practices, enabling students to navigate challenges effectively and remain focused on their objectives.

Relevance and application for students in the context of social media:

- **Impulsive Decisions:** Awareness of emotional triggers helps students to avoid impulsively sharing or reacting to posts.
- **Emotional Regulation:** Students learn to manage their emotions when confronted with upsetting content online, reducing impulsive reactions.
- **Stress Management:** Recognizing social media's effects helps students to deal with the social and emotional pressure.
- **Resilience:** They build resilience by learning to navigate online challenges and setbacks, fostering a positive outlook.
- **Goal Setting:** They set personal goals for healthy social media habits, such as limiting screen time or curating positive feeds.
- **Time Management:** Students learn to balance social media use with other responsibilities, promoting a healthy lifestyle.

04.

RESPONSIBLE DECISION MAKING:

Responsible decision-making refers to the process of making choices based on ethical considerations and the potential impact on oneself and others. This involves evaluating consequences, considering the well-being of others, and using critical thinking skills. Teachers can encourage responsible decision-making through activities that involve problem-solving scenarios, discussions about ethical dilemmas, and reflections on past decisions.

Relevance and application for students in the context of social media:

- **Reflective Thinking:** Developing critical thinking skills encourages reflection on past decisions and their outcomes.
- **Evaluating Information:** Students learn to critically assess the credibility of information before sharing it online.
- **Considering Consequences:** They think about the potential impact of their online actions on themselves and others.
- **Ethical Choices:** Students understand the importance of making ethical decisions regarding content sharing and interactions and of not using manipulative techniques to “persuade” others.
- **Managing Impulses:** Awareness of emotional responses helps them pause before reacting to provocative posts.
- **Weighing Options:** Students practice weighing different perspectives before making online choices.
- **Seeking Help:** They learn to ask for guidance from trusted adults or peers when faced with difficult decisions.

RELATIONSHIP SKILLS:

05.

Relationship skills encompass the ability to communicate effectively, work collaboratively, and build positive relationships with others. This includes active listening, conflict resolution, and teamwork. Teachers can promote relationship skills by facilitating group projects, role-playing exercises, and discussions that teach constructive communication techniques, thereby helping students foster healthy social interactions.

Relevance and application for students in the context of social media:

- **Effective Communication:** Students learn to express themselves clearly and respectfully in online interactions.
- **Active Listening:** They practice listening to others' perspectives and responding thoughtfully, fostering better conversations.
- **Conflict Resolution:** Students develop skills to handle disagreements constructively in digital spaces.
- **Building Trust:** They learn the importance of trust in online relationships and how to cultivate it through honesty and integrity. Using empathy skills helps students strengthen their online connections.
- **Setting Boundaries:** Students learn to establish healthy boundaries in their online interactions, ensuring respectful and safe relationships.

KNOW AND MANAGE YOUR HABITS USING SOCIAL MEDIA

Practical Activity 1

(OFFLINE)

Objective:

Help students identify and reflect on their social media habits to promote more conscious and responsible usage.

Instructions:

1. Introduction (5 minutes)

- Begin with a brief discussion about social media habits. Ask students to share what platforms they use most frequently and why. Discuss common habits, such as scrolling mindlessly, sharing content without verification, or comparing themselves to others.

Materials:

- Journals or paper
- Pens or pencils
- A whiteboard or chart paper
- Sticky notes

2. Habit Reflection (10 minutes)

Prompt students to spend a few minutes writing in their journals about their social media usage.

Encourage them to consider the following questions:

- How much time do you spend on social media each day?
- What types of content do you engage with (videos, articles, posts)?
- What content do you post/share yourself?
- What is the goal you are seeking when posting/sharing posts on social media?
- Do you consider the possible impacts of posting/sharing posts on social media (how the other might feel about it, what the post could evoke in others)?
- How do you feel before and after using social media?
- Do you often find yourself sharing content without checking its reliability?



3. Group Discussion (15 minutes)

- Form small groups (4-5 students each) and have them share their reflections with one another. Encourage them to discuss common themes, positive habits, and habits they want to change. Assign each group a sticky note color to note down key takeaways or insights from their discussions.

4. Class Discussion and Creating a Habit Chart (10 minutes)

- On a whiteboard or chart paper, create a "Social Media Habits" chart with two columns: "Positive Habits" and "Habits to Change." Have each group share 2 to 4 (depending on number of groups) positive habit and one habit they want to change. Write these in the appropriate columns.
- Make students discuss the most relevant habits and make them debate what habits they mostly follow, and make them reflect on it.

5. (optional) Developing Personal Action Plans (10 minutes)

- Ask students to create a personal action plan for using social media more consciously. They can set specific goals, such as limiting time spent on platforms, verifying sources before sharing, or engaging with content that uplifts them.

6. Closing Reflection (5 minutes)

- Conclude with a class discussion about the insights gained and the importance of being mindful of social media habits. Encourage students to commit to their action plans and support one another in their goals.

Assessment:

- Monitor group discussions for engagement and understanding.
- Review the habit chart for common themes.

Follow-Up:

- Encourage students to revisit their action plans after a set period (e.g., one month) to reflect on their progress and make any necessary adjustments.

UNDERSTAND YOUR FEELINGS TO DEVELOP SELF-AWARENESS SKILLS

Practical Activity 2 (OFFLINE)

Objective:

The exercise is designed to help students understand their own emotions and develop one of the key components of self-awareness skills. It will help students identify and manage their emotional responses to social media content. The ability to identify own emotions is a crucial skill for managing emotional responses to social media content and for building healthy relationships in the online and offline world. For more detail see the social-emotional learning SEL in Module 3.

The exercise could also be used in foreign language classes to learn new vocabulary concerning emotions and feelings.

The exercise could be modified for art class by using drawing or abstractions (colour etc.) for depicting the feelings.

Instructions:

1. Introduction (5 minutes)

- Begin with a brief discussion on how social media can influence emotions. Ask students to share any experiences where they felt a strong emotion after viewing or reading something online.
- For introduction a short TikTok video could be shown to the class for inspiration:

[TikTok video link](#)

2. Exploration (10 minutes)

- Display various social media posts (fictional and appropriate) that might provoke different emotional reactions (e.g., excitement, anger, sadness). Ensure a variety of content is shown.

Materials:

- Social media posts (fictional and appropriate) that might provoke different emotional reactions (see examples in the materials)
- Projector or screen for displaying content (posts could also be printed on paper and handed to the groups of students)
- Copies of a "Feelings Wheel" or emotion chart
- Journals or paper for writing
- Additional: PC connected to the internet and projector to show introduction on TikTok or YouTube video (see links below)

3. Group Discussion (10 minutes)

- Divide the class into small groups. Provide each group with a "Emotion Wheel" (2) or emotion chart.
- Ask them to identify the emotions they might feel when they see each type of content presented.
- (optional) Make students Create an on-line word cloud from the

4. Self-Reflection (10 minutes)

- Have students individually reflect and write in their journals about a recent social media interaction that triggered a strong emotion. Encourage them to explore why it affected them.

(2) The Emotion Wheel was created by Robert Plutchik to help patients identify and describe the 8 core emotions: Joy, Sadness, Fear, Anger, Anticipation, Surprise, Disgust, and Trust.



5. (optional) Mindfulness Practice (5 minutes)

- Lead a short mindfulness exercise focused on breathing, encouraging students to practice calming techniques when they encounter emotional content online.

6. Closing Discussion (5 minutes)

- Come back together as a class and discuss strategies for managing emotional responses in a healthy way.
- Encourage students to share insights and strategies they have learned.
- Teacher can discuss with students specific situations, people, or events that trigger strong emotional responses can help in developing coping strategies for future encounters.
- Point out to students that they should refer to emotions as "comfortable" and "uncomfortable" (and not as "positive/good" and "negative/bad"). Remind students that all emotions, both "comfortable" and "uncomfortable", provide to us valuable information.

Assessment:

- Monitor group discussions for understanding.
- Review journal entries to ensure students are recognizing and exploring their emotions.

Follow-Up:

- Encourage students to apply these reflection techniques during their personal social media use over the next week and discuss changes they observe in their reactions.
- Stress that it is okay to feel emotion or be excited about something; the goal here is for students to be able to reflect on their emotions.
- Remind students that all emotions, both "comfortable" and "uncomfortable", provide to us valuable information.
- Encouraging students to talk to friends, family, or a mental health professional about their emotions and the effects of social media. This can provide comfort and perspective, helping to process emotions in a supportive environment.

ADDITIONAL MATERIALS

Annex: Emotion Wheel

Annex: Set of social media posts to reflect upon the feelings

We are working on these materials so they could be used for translation

Additional definitions for the exercise:

Feelings are subjective experiences that arise from specific emotions and reflect personal interpretations of emotional responses. They are influenced by individual thoughts and experiences.

Emotions, on the other hand, are physiological responses to stimuli, often characterized by distinct physical reactions and expressions. Emotions are generally more automatic and can include basic states like joy, anger, fear, and sadness.

In summary, emotions are the initial reactions to stimuli, while feelings are the personal, internal experiences that arise from those emotions.

Definitions for each of Robert Plutchik's eight primary emotions:

1. Joy: A feeling of great pleasure and happiness. It often arises from positive experiences, achievements, or fulfilling relationships.
2. Trust: A sense of security and reliability in someone or something. It is the foundation of healthy relationships, fostering openness and connection.
3. Fear: An emotional response to perceived threats or danger. It serves as a protective mechanism, prompting individuals to react to protect themselves.
4. Surprise: A brief emotional response to an unexpected event or situation. It can be positive or negative and often leads to curiosity or shock.
5. Sadness: An emotional state characterized by feelings of loss, disappointment, or sorrow. It often prompts introspection and a desire for comfort.
6. Disgust: A strong feeling of aversion or repulsion towards something considered unpleasant or offensive. It serves as a protective response to avoid harmful substances or situations.
7. Anger: An emotional response to perceived injustice, frustration, or threat. It can motivate assertive actions but can also lead to destructive behaviors if not managed appropriately.
8. Anticipation: A feeling of excitement or expectation about a future event. It can generate enthusiasm or anxiety, depending on the context and outcome expected.



LEARN TO COPE WITH DIFFICULT SITUATIONS

Practical Activity 3 (OFFLINE)

Objective:

Help students understand and reflect on the importance of accepting mistakes, asking for help, and recognizing that it's okay to have feelings or not to know everything. Challenging negative thoughts and reframing them into a more positive or realistic perspective can help reduce emotional distress. This exercise creates a comfortable space for mental health and show students how they can deal with difficult situations.

Instructions:

1. Introduction (10 minutes)
 - Begin with a brief discussion about the importance of making mistakes, seeking help, and acknowledging limitations. Ask students to share times when they felt unsure or experienced challenges and how they overcame them.
2. Group Formation (5 minutes)
 - Divide the class into small groups of 4-5 students.
3. Group Brainstorming (15 minutes)
 - Each group receives a large sheet of paper and is tasked with creating a mind map around the theme "It's Okay To...".
 - Encourage them to brainstorm as many ideas as possible regarding what is acceptable in terms of mistakes, seeking help, or admitting uncertainty. The themes should be motivational, positive or seek solutions (see additional materials for examples).
 - They can write down phrases, draw pictures, or use symbols to represent their ideas.

Assessment:

- Monitor group discussions and presentations to gauge understanding.
- Use students' reflections to assess their comfort with the themes explored.

Materials:

- Large sheets of paper or poster boards
- Markers, crayons, or colored pencils
- Sticky notes
- A timer

4. Reflection with Sticky Notes (10 minutes)
 - After completing their mind maps, each student takes a sticky note and writes down a personal experience related to one of the ideas on their group's mind map (e.g., a time they made a mistake or asked for help).
 - Students then place their sticky notes on their group's poster.
5. Presentations (10 minutes)
 - Each group presents their mind map to the class, explaining their thoughts and sharing insights from the sticky notes.
6. Class Discussion (10 minutes)
 - Facilitate a discussion where students share what they found most valuable from the exercise. Highlight common themes and emphasize the importance of understanding that struggling is part of learning.
7. Closing Activity (5 minutes)
 - To wrap up, have students silently reflect and then share one takeaway from the exercise. This can be a sentence they write on a piece of paper or something they vocalize in a circle.

Follow-Up:

- Encourage students to keep their mind maps and revisit them in the future, reinforcing the idea that embracing mistakes and uncertainties is okay.
- The created mind maps could be placed on the class wall for future reference, or if there is time left, the class can create one map reflecting the outcomes of the group activity.

ADDITIONAL MATERIALS

Suggestions on how to lead students to create the mind map:

Design Concept for "It's Okay To..." Mind Map Chart

1. Central Circle:

- Place a large circle in the center labeled "It's Okay To..."

2. Branching Segments:

Create several thick lines extending from the central circle to smaller circles surrounding it. Each smaller circle can represent one of the main themes, such as:

- Be yourself
- Make Mistakes
- Ask for Help
- Not Know Everything
- Have hard days
- Feel your feelings
- To start over again

3. Sub-branches:

From each smaller circle, draw thinner lines branching out to more specific phrases or ideas related to the theme. The themes should be motivational, positive or seek solution.

For example, under "Make Mistakes," you might include:

- "It's a part of learning"
- "Everyone makes them"
- "Mistakes help us grow"

For example, under "Ask for Help," you might include:

- "Seek support to get help"
- "Talk to friend"
- "Talk to parents"

4. Visual Elements:

Use different colors for each theme to make it visually appealing.

Add illustrations or icons next to each theme. For example:

- A lightbulb for ideas
- A question mark for asking help
- A heart for support

5. Sticky Notes Section:

- Reserve a section on the chart for sticky notes, where students can later add their personal experiences related to the themes.
- This chart can be created on a large sheet of paper or on a whiteboard, allowing students to visually engage with the concepts as they brainstorm and reflect during the activity.

MINDFULNESS ACTIVITIES TO PROMOTE CONSCIOUS USE OF SOCIAL MEDIA

Practical Activity 4 (OFFLINE)

Objective:

Implementing these techniques can help students cultivate mindfulness, enhance emotional regulation, and improve their ability to critically assess information.

Instructions:

Concrete mindfulness techniques that can be effectively used in the classroom:

1. Mindful Breathing: Begin or end classes with a few minutes (could be 1-3 minutes) of deep breathing exercises. Students focus on their breath which helps center their thoughts:
 - Option 1: inhaling for a count of four, holding for four, and exhaling for four.
 - Option 2: deep slow inhaling to comfortable fullness, holding breath naturally till it feels comfortable, and deep slow exhaling.
2. Body Scan: Guide students in a body scan meditation, where they focus on different parts of their body, noticing any tension or discomfort. This practice can enhance self-awareness and relaxation.

Materials:

- Class or outdoor environment

3. Five Senses Exercise: Encourage students to take a moment to observe their surroundings using all five senses. They can describe what they see, hear, smell, touch, and taste, fostering awareness of the present moment.
4. Mindful Journaling: Allocate time for students to write reflectively about their thoughts and feelings. Prompts like "What am I grateful for today?" or "What emotions am I experiencing right now?" can help students process their experiences.
5. Gratitude Circle: Create a space for students to share something they are grateful for, promoting positive emotions and a sense of community.
6. Mindful Listening: Pair students up and have one speak for a minute while the other listens without interrupting. Afterward, the listener summarizes what they heard, reinforcing focused attention and empathy.
7. Nature Walks: Organize outdoor walks where students can focus on the sights, sounds, and smells of nature, enhancing their connection to the environment and promoting relaxation.

Blame Game: Unpacking Social Media Manipulation Spotting Scapegoating and Misleading Language in Social Media Posts

Practical Activity 5 (ONLINE)

The digital free activity can be accessed on:



The digital free activity can be accessed on: <https://wiseme.eu/module3-students-en/>

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- **Other sources**
- **ACTIVE Toolkit: Methodology for teachers providing other sources and perspectives for the covered topics** (<https://www.active-citizen.eu/active-results>)
- **Inoculation Science** (initiative from JIGSAW, University of Cambridge and University of Bristol). See videos on the web site discussing different manipulative techniques.
- **Netflix document series: Hitler and the Nazis: Evil on Trial, which very well depicts issue of scapegoating and its consequences** (<https://www.imdb.com/title/tt32331294>)



MODULE 4: ETHICAL CONSIDERATIONS AND RESPONSIBLE INFORMATION SHARING

MODULE OVERVIEW

This module is designed to raise students' awareness regarding their virtual presence and behavior in both educational and personal involvement with information processing. Living together requires a care and mutual understanding, rational approach towards conflicts solving, and upgrading our strategies in these contexts seems to be an urgent need in the fast-paced developing world.

MODULE OBJECTIVES

Upon completion, students will be equipped to:

- ◆ Promoting respectful and informed online behavior,
- ◆ Fostering responsible digital citizenship,
- ◆ Promoting a more analytical and critical approach to one's processing in the digital sphere.

STRUCTURE OF THE MODULE

4.1: Ethics in information sharing

- ◆ The moral responsibility of sharing information online
- ◆ Legal implications of spreading misinformation
- ◆ Promoting respectful and informed online behavior

4.2: Responsible digital citizenship

- ◆ Encouraging students to become responsible digital citizens
- ◆ Building resilience to manipulation and fostering critical thinking
- ◆ Creating a positive digital footprint



4.1: ETHICS IN INFORMATION SHARING

The moral responsibility of sharing information online

Information has always been considered one of the most powerful resources of humankind. The concept lies at the crossroads of social and exact sciences, on the one hand, with its internal tension between quantitative and qualitative dimensions; on the other hand, it is semantically tightly related to other concepts as 'knowledge' and 'data' – all of them pivotal in today's digital world basic vocabulary.

Moreover, information implies the dynamic intercourse between personal and interpersonal level, individual and communal existence, private and public sphere. Socio-culturally and historically regarded information processing and save guarding is a phenomenon of great value and care for the survival of tribes, peoples, empires, modern nation states. The etymological definition of the term reveals the importance of giving 'form' to something, shaping, modelling realities, thus revealing the implicit meaning of overcoming chaos and disorder. To summarize, information is a world and a community-generating mechanism and an almost ontological and cosmological power introducing the cardinal parameters of societal existence.



The aforementioned dynamics between personal and interpersonal further foster the moral consideration of information processing and sharing with a special focus on today's world leading characteristic features. Bearing in mind Aristotle's coining of the term ethics (from 'ethos', 'ἦθος' in Ancient Greek) we are aware of the importance of living together in practical terms and according to some shared virtues and rules. However, it is much easier to philosophically state it and speculate it than to implement it in a real-life context. Free wills adjustment and social arrangement is not an easy task at all and a great generation of

Enlightenment Europe political and social philosophers invested their minds and intellectual effort into creating the pillars of the modern nation states. The semantic continuation and strong internal bond between the moral and legal realms were among their primary concerns towards the long path of converting the theoretical social contract into a tangible nation state constitution. The common good achieving being the primary concern, on the one hand, and the not rare sovereignty shift from monarch to people in 19th century, on the other, created the urge for reconsidering the principles of living together in a liberal democratic climate. Here to mention one of these great Enlightenment minds, namely John Locke with his major work Two treatises of government (1689). The latter leaves us with the philosophical heritage of the importance of the peaceful and rational free will social adjustment: "Being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions."



Thus, Locke's thought has always been a beacon for the liberal thought and a guiding force for practical decisions. The actual epoch witnesses the human beings' empowerment in the digital sphere, and the extreme testing of the boundaries of information and content sharing via websites, platforms and social media.

The rational response of both governments and technocrats seems to gravitate around the far-ranging moral implications of the online behavior and communication. Both the storage and the sharing of information is easier in the digital sphere which further increases the need for ethical assessment and attitude, responsibility being the pivotal concept on the reflective horizon to rise. Is information morally neutral? How do we apply it in different contexts? With what intentions and purposes? How is sensitive information (personal data including passwords, ID cards data, medical files and results, etc.) morally and legally protected? These are some of the most considerable questions to raise.



Legal implications of spreading misinformation

The definitions of 'misinformation', 'disinformation', 'malinformation', and 'fake news' provided in Module 1, the meaning and semantical content span of the terms are easy to discern. When the educational sphere is addressed the problems with information spread seem to resonate with a bigger emergency and gravity.

Contemporary educational policies require a deep and serious reconsideration of almost every aspect of information broadcasting, information-data-knowledge differentiation and management, and textual assignments grading procedures. Democratic-oriented governments worldwide have been gradually building policies in their legal frameworks for spreading misinformation limitation and prohibition. This state of affairs is self-evident in terms of the importance of the problems raised encompassing every private and public sphere. Legislation is the highest form of social contract presence and the most rigorous means of setting a common rational framework of living. In its Code of practice on disinformation (European Commission, 2022)

first established in 2018 and further strengthened in 2022, European Union introduces some crucial regulations for trade associations and the advertising sector. The example of the Australian authorities is quite representative as well: "The WA Government has introduced the Privacy and Responsible Information Sharing Bill to Parliament to reform privacy protections for individuals and the accountability of information sharing within government. The proposed legislation will provide Western Australians with more control over their personal information, improve the delivery of government services and create local research and development opportunities." (Department of Education, 2024).

While there is no unified **European legislation** specifically regulating the spread of false information across all EU member states, several countries have implemented or proposed laws to address this issue:

Germany

The Network Enforcement Act (NetzDG) requires social media platforms to remove clearly illegal content, including obvious misinformation, within specific timeframes.

France

The Law Against Information Manipulation allows judges to order the rapid removal of false news during election periods.

Spain

While there is no specific law, the country uses its Criminal Code to prosecute serious cases of disinformation that may constitute crimes like hate speech or defamation.



It's important to note that regulating misinformation is complex, involving a balance between freedom of expression and protection against false and harmful information. The European Union is working towards a more coordinated approach through the Action Plan Against Disinformation and the Code of Practice on Disinformation, but there is currently no specific pan-European law on this topic.

Against Disinformation and the Code of Practice on Disinformation, but there is currently no specific pan-European law on this topic.

The European Union has taken several legal and regulatory steps to combat the spread of disinformation and fake news:

- **Digital Services Act (DSA):** This major law regulates online platforms, including social media, to be more transparent and accountable in tackling disinformation. Large platforms are required to assess and mitigate systemic risks related to the spread of disinformation or harmful content.
- **Code of Practice on Disinformation:** Updated in 2022, this voluntary code requires signatories to strengthen measures against manipulative behavior used to spread disinformation, such as fake accounts and bot-driven amplification
- **European Media Freedom Act (EMFA):** This new law aims to protect media outlets against disinformation while ensuring press independence. It requires EU member states to respect editorial freedom and protects journalists from spyware and prosecution for protecting sources.
- **Sanctions for non-compliance:** Companies failing to comply with DSA rules could face fines of up to 6% of their global turnover and potential service suspension in the EU.
- **Content removal:** Platforms are required to remove illegal content expeditiously, though spreading false or misleading information is not generally illegal in the EU due to freedom of expression protections.
- **Transparency measures:** The DSA and EMFA both emphasize increased transparency in political advertising and media ownership to combat disinformation.
- **Research support:** Platforms are required to provide better access to data for researchers studying disinformation.
- **Fact-checking initiatives:** The Code of Practice on Disinformation aims to extend fact-checking coverage across all EU Member States and languages.

It's important to note that while these measures aim to combat disinformation, they also strive to balance this goal with protecting freedom of expression. The EU's approach focuses on curbing the impact of online lies while preserving free speech, rather than outright banning disinformation.

Promoting respectful and informed online behaviour

Whatever legal policies and regulations the national governments or international organizations release, the personal input, self-awareness and self-control rest the fundamental and primary mechanisms for a healthy online sphere and interaction. A critical reassessment of each person's values and goals alongside with the matching percentage of the latter with the communal ones is inevitably needed in a sphere which boundaries seem to expand in a mind-blowing speed. The ethical term of 'respect' reveals the Latin etymology of reciprocal seeing and observation – an interesting linguistic remark in the contemporary visual-based world. A personal demand for recognition and respect should necessarily meet everybody else's identical demand. Thus, a reevaluation of the importance of community and of individuality-community balance is desperately called for. The online anonymity could be quite misleading in the ethical resonance of the problem – not having the sight of the other in front of you might be considered an opportunity for violating the moral code. Which could be a huge alert and an eye-opener for the humanities and social studies curriculum areas to sharpen their educational tools and strategies for an ethical awareness raising. A real and applicable netiquette is to be taught and implemented.

Here comes the educational strategies equipment of philosophy, psychology, civic education, languages such as discussions and debated, role-play games, drama-based techniques, case-study analysis. If students are ethically aware in the face to face presence and communication so they are expected to be in their digital involvement and online behavior. Moreover, altering the two modes of educating would be the best policy – spending too much time online might result in a lack of emotional sensitivity, empathy, and general psychic disorientation. Encouraging teamwork and oral academic performance instead of written one might keep fresh each person moral compass.

4.2: RESPONSIBLE DIGITAL CITIZENSHIP

Encouraging students to become responsible digital citizens

In its crucial document [Digital Education Action Plan 2021-2027](#) European Union clearly sets ‘the needs for higher levels of digital capacity of education and training systems and institutions.’ EU DigComp framework serves multiple purposes including ‘designing competence assessment tools, creating training courses and materials, and identifying professional digital profiles within the realms of employment, education and training, and social inclusion’ exemplified in DigComp Implementation guide. Being digitally competent is set as a life-long learning task for the 21st-century citizen.

It is important to claim that students are supposed to be taught and well trained in responsible behavior from an early age due to the incredibly fast development and new digital challenges. For instance, exposure to artificial intelligence (AI) might be a useful educational strategy for better understanding of the *diferentia specifica* of humans, and further of what intelligence and emotions are. To summarize, new digital technologies provide us with a chance to raise our self-image, limitations and capacities as a species reconciling both spheres – biological and socio-cultural one. This is precisely what EU DigComp framework ‘communication and collaboration’ item means.

To further reveal the dimensions of responsibility in the educational area, teachers should encourage students to carefully read and understand the practical consequences of the legal documents arranging the digital policies. This is to stress students prevailing lack of interest in legislative full-length texts given. A more interactive and innovative game-based approaches are needed here applying the learning-through-experience 21st century prevailing educational paradigm.



Here are several effective strategies we can use as teachers to promote digital citizenship among students:

Integrate digital citizenship into the curriculum:

Incorporate lessons on online safety, digital ethics, and responsible internet use across various subjects. This approach helps students understand that digital citizenship is an essential life skill, not just a separate topic.

Model responsible online behavior:

As an educator, demonstrate proper digital etiquette and responsible use of technology in your own interactions with students and colleagues. Students often learn best by observing and emulating positive examples.

Teach critical thinking skills:

Help students develop the ability to evaluate online information critically. Encourage them to question the reliability and authenticity of online sources, promoting digital literacy.

Discuss online reputation management:

Emphasize the importance of maintaining a positive digital footprint. Teach students that their online actions can have long-lasting consequences for their personal and professional lives.

Promote online safety:

Educate students about potential online risks such as cyberbullying, online predators, and phishing scams. Provide them with strategies to protect themselves and their personal information online.

Encourage ethical online behavior:

Discuss the importance of respecting others online, including proper netiquette and the consequences of cyberbullying. Also, address issues like copyright and plagiarism in the digital context.

Foster digital empathy:

Help students understand the impact of their online actions on others. Encourage them to consider how their words and actions in digital spaces might affect their peers and the broader online community.

Provide hands-on experience:

Create safe, controlled environments where students can practice digital citizenship skills. This could include simulated social media platforms or online collaboration tools within the school's digital ecosystem.

Address digital well-being:

Discuss the importance of balancing screen time with other activities and maintaining good mental health in the digital age.

Empower student leadership:

Encourage students to become digital citizenship ambassadors, allowing them to teach and mentor their peers on responsible online behavior.

By implementing these strategies, you can help your students develop the knowledge, skills, and attitudes necessary to become responsible digital citizens, ensuring they can navigate the online world safely, ethically, and effectively.

Imagine the internet as a huge, global city. Just like in any city, there are rules, expectations, and ways to behave that keep everyone safe and happy. Being a good digital citizen is like being a good citizen of this online city.

Here's what it means to be a **responsible digital citizen**:



Protect yourself: Just as you'd lock your house door, use strong passwords and be careful about sharing personal information online.



Respect others: Treat people online with kindness, just as you would in person. Remember, there's a real person behind every username.



Think before you post: Whatever you share online can stay there forever. Before posting, ask yourself: "Would I be okay with my grandma or a future employer seeing this?"



Be a fact-checker: Not everything online is true. Always verify information before believing or sharing it.



Stand up against cyberbullying: If you see someone being mistreated online, speak up or tell a trusted adult.



Balance your online and offline life: Remember to spend time in the real world too!



Use your online powers for good: The internet gives you a voice - use it to make positive changes in the world.

Being a good digital citizen isn't just about following rules - it's about making the internet a better place for everyone. You have the power to shape the online world. How will you use it?"

This explanation uses relatable analogies, clear points, and empowering language to help students understand and embrace the concept of digital citizenship.

Building resilience to manipulation and fostering critical thinking

A 21st-century set of tools requires a sharpening of one's media literacy tools and techniques. "We're in an information environment where we're constantly searching as part of our daily experiences", says UNC School of Information and Library Science assistant professor Francesca Tripodi, who studies the social dimensions of search. That environment, and its endless barrage of information, means that even users with the best of intentions may run into problems with the searches they conduct and the information that gets returned (Wicks, 2021). Information spread in the digital era is predominantly dependent on algorithms, a term initially representing "procedures for solving a mathematical problem in a finite number of steps that frequently involves repetition of an operation" according to the Encyclopedia Britannica Company. The renowned social thinker Yuval Hoah Harari explores the relentless nature and essence of algorithms in his recent book 'Nexus'. 'Algorithms don't sleep, they don't need rest', Harari argues, compared to organic entities human beings included" (Amanpour and Company, 2024). In this context the demand for building resilience to manipulation and the development of critical thinking becomes urgent.

Ethically assessed the digital sphere is not neutral and innocent, people transfer in it all types of relations they have created in the analogous reality. Misleading and manipulation for various purposes are stalking which requires vigilance and critical approach. Among the techniques might be:

- ◆◆ Cross-referential check of the information (comparison of several sources content)
- ◆◆ Author name and/or editors/publishing house credentials presence
- ◆◆ Capacity to search and identify proper argumentation components (problem-oriented introduction, arguments-based exposition, logically valid conclusions)
- ◆◆ Acquaintance with the informal fallacies in the argumentation process (e. g. appeal to fear, ad hominem, appeal to ignorance, irrelevant authority, appeal to pity, straw person, complex questions, composition and division, questionable cause)
- ◆◆ Language and style evaluation sensitivity (grammar, syntax, semantics, stylistics, etc.)

To summarize, polyphonic and multitasking approach is needed as well as knowledge in all fundamental social studies areas.

For more digitally based tools for information verification we might use:

- ◆◆ Fact-checking websites (e.g., Snopes, FactCheck.org, PolitiFact)
- ◆◆ Reverse image search tools (e.g., Google Images, TinEye)
- ◆◆ Media bias and reliability checkers (e.g., AllSides, Media Bias/Fact Check)



Creating a positive digital footprint

When students are young long-lasting goals and far-ranging implications are usually not at the focus of their direct interest. Their digital 'joie de vivre' is launched to the highest extent, they want to taste every platform, create an account in as many social media as possible, and thus fruitfully enjoy and take advantage of their youth freedom and light-hearted existence. Digital inclusion creates a new and special aspect of the social inclusion, and further nourishes the new technologies-related vocabulary. A good example of this is the psychological 'FOMO' concept – 'the fear of missing out', of not being present, available, with active status on a social platform.

On the other hand, contemporary young people are delicate and extremely sensitive in terms of their digital presence, content uploaded and virtual image among peers, so to say in terms of their digital footprint. Few would like to intentionally create a negative virtual identity.

Thus, an awareness is needed in several aspects:

- ◆◆ Social media platform credentials and reputation
- ◆◆ Social media platform privacy policy and data protection
- ◆◆ National legislation and policies in the digital field
- ◆◆ Acquaintance with all digital tools provided by the registration in the platform
- ◆◆ Content uploading and content deleting options (the right of the person to withdraw from databases).

The significance of this digital footprint increases with the age acceleration and the psychological maturity. When the period for a university application or an employment interview comes, with the portfolio preparation, the virtual presence and the digital footprint are considered an important facet from the whole personal social showcase. Irrelevant, misleading, out-of-date, or fake information for us in the digital realm is supposed to be omitted. This task obviously would require a constant life-long effort the digital technologies gaining further and further territories.

Moreover, the same care for a positive digital footprint should be demonstrated for the others' virtual presence. Unfortunately, it is not a rare practice the virtual revenge between students with the application of disinformation or malinformation. Cyberbullying, uploading humiliating visual content, or deliberately fabricating one using digital instruments, including AI simulations and bricolage, is to be undeniably assessed as morally negative.

To conclude, the role of community/communal will, the common good, the levels of democratic maturity, a really enlightened educational curriculum, and a citizenship cohesion and activity are crucial factors for protecting the ethical standards for both analogous and digital spheres. A critical approach should be implemented towards information reliability status as well as towards digital world presence in human culture and future.

Objectives

- Teach students to better understand the anatomy of clickbait headlines
- Familiarize students with fact-checking techniques and tools
- Encourage mindfulness to emotionally charged content
- Building resilience to manipulation and fostering critical thinking

Required Tools and Materials

- Digital Tools (access to computers, tablets, or smartphones with internet connectivity)
- Fact-checking websites (e.g., Snopes, FactCheck.org, PolitiFact)

Printed Materials

- Worksheets for note-taking
- A viral claim/headline (intentionally fabricated) for analysis
- Whiteboard/Project or for group discussions and demonstrations.

Activities

Step 1: Introduction (15 minutes)

- ◆◆ Introduce the concepts of **disinformation** and **malinformation**
- ◆◆ Begin with a brief discussion on what the difference between misinformation, disinformation, and malinformation is. Some questions to open the discussion:
 - ◆◆ *What was the most shocking headline you have ever heard?*
 - ◆◆ *What was the most unconventional thing a shocking headline made you do?*

Step 3: Teamwork (20 minutes)

- ◆◆ Divide the class into 3 groups performing different tasks on the visual and textual materials assigned as follows:
 - ◆◆ **Team A task:** Explore the technical quality of the images and make assumptions on their credibility
 - ◆◆ **Team B task:** Investigate the magazine credentials and responsible team
 - ◆◆ **Team C task:** Explore the linguistic features (grammar, syntax, style, punctuation) of the headline

Step 2: Provide the leading visual material (5 minutes)

- ◆◆ Show some hypothetical photos from a funeral of an extremely popular band singer declared deceased by a striking online magazine headline.

Step 4: Group presentations of the investigation tasks (5 minutes per team + a brief 3-minute discussion session after each team presentation; overall: 27 minutes)

Questions to be asked:

- ◆◆ Are there any visual signs that the photos uploaded by the magazine are technically manipulated or intentionally fabricated by digital tools including AI?
- ◆◆ What online information could be found on the magazine reputation? Can you identify by their names, images and professional responsibilities the main members of the editorial team?
- ◆◆ Are there any peculiarities in terms of the verbal presentation of the information? Any grammar mistakes, word order imperfections, style variety?

Step 5: Application of digitally based tools for information verification (10 minutes):

- ◆◆ Fact-checking websites (e.g., Snopes, FactCheck.org)
- ◆◆ Reverse image search tools (e.g., Google Images, TinEye)

Additional Information:

- Assessment and Follow-Up
- ◆◆ Evaluate participation in teamwork and group discussions.
 - ◆◆ Evaluate the effectiveness of the information verification tools.
 - ◆◆ Assess the human psyche driving mechanisms in a liminal situation.

Step 6: Evaluation of the verification tools and closing discussion (10 minutes):

- ◆◆ How would you feel if you knew from a clickbait headline that your favorite band leading singer was tragically deceased?
- ◆◆ What kind of irrational actions might an emotionally charged content foster?
- ◆◆ What the psychological and ethical damages from such a content might be?
- ◆◆ What rational fact-checking steps might we apply as a critical thinking approach to the headline?

Creating a positive digital footprint

Practical Activity 5 (ONLINE)

The digital free activity can be accessed on: <https://wiseme.eu/module4-students-en/>

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MODULE 5: DETECTING FAKE NEWS & DISINFORMATION

MODULE OVERVIEW

This module is designed to equip teachers with the knowledge and strategies necessary to help students aged 12-17 identify fake news and disinformation.

Key areas of focus in this module include the identification of common traits in misleading information, the development of critical thinking skills, and the application of fact-checking techniques. Through an interactive approach, teachers will learn how to integrate these concepts into their curriculum, enabling students to become more discerning consumers of information.

MODULE OBJECTIVES

Upon completion of this module, students will be able to:

- ◆ Recognize commonly used manipulative techniques used to spread fake news.
- ◆ Develop critical thinking and media literacy skills to evaluate online content effectively.
- ◆ Use online verification tools to fact-check information.
- ◆ Practice responsible online behavior.

STRUCTURE OF THE MODULE

5.1: Critical Thinking & Fake News Identification: Essential Skills

- Understanding the challenge of misinformation
- Common traits of misleading information
- Developing a critical mindset
- Mastering fact-checking techniques

5.2: Fact Checking and Verification: From Theory to Practice

- Utilizing online tools
- Reverse image search and visual analysis techniques
- Fact-checking platforms and their effective use
- Browser extensions and other verification tools

5.1: CRITICAL THINKING & FAKE NEWS IDENTIFICATION: ESSENTIAL SKILLS

Understanding the challenge of misinformation

The proliferation of fake news and disinformation presents a significant challenge to navigating this complex information landscape. This section delves into the core of understanding misinformation, equipping students with the foundational knowledge to recognize and analyze misleading information. By understanding key factors, students will be able to develop the initial skills necessary to firstly identify misleading information, laying the foundation for critical thinking and responsible online behavior.

The digital age presents a constant barrage of information, making it increasingly difficult to discern truth from fiction. Navigating this complex landscape requires more than just passively consuming information; it demands critical thinking skills and a proactive approach to verifying information. Instead of simply accepting information at face value, individuals must develop a critical mindset. This involves questioning the assumptions underlying news stories and online content. By asking "who created this information?", "what is the purpose of this information?", "who is the intended audience?", "what evidence supports the claims?", and "what are the potential biases of the source?", students can begin to critically analyze the information they encounter.

This section will equip students with the essential tools to navigate the complexities of the online information landscape. By developing a critical mindset, mastering fact-checking techniques, and actively seeking out diverse perspectives, students can become more discerning consumers of information and better equipped to identify and resist the influence of misinformation.



Common traits of misleading information

Misleading information often exhibits several identifiable characteristics. Understanding these traits allows students to recognize and question dubious content effectively.

◆ Sensational headlines:

Misleading articles often use exaggerated, emotionally charged, or clickbait-style headlines to capture attention and encourage sharing. These headlines can be misleading or entirely false.

◆ Emotional manipulation:

Many misleading articles rely on strong emotional appeals, such as fear, anger, or outrage, to provoke an immediate reaction from readers without encouraging deeper analysis.

◆ Misleading images and videos:

Out-of-context images, altered visuals, and deepfake videos can distort reality. Recognizing how images and videos are manipulated is key to identifying misinformation.

◆ Lack of credible sources:

Fake news frequently lacks verifiable sources or relies on anonymous, biased, or unreliable references. Checking for authoritative sources helps determine credibility.

◆ Logical fallacies:

Fake news often employs faulty reasoning, such as false dilemmas, ad hominem attacks, and appeals to conspiracy theories, to create persuasive but deceptive narratives.

◆ Use of jargon and complex language:

Some misinformation sources use overly technical or convoluted language to obscure falsehoods, making verification difficult for the average reader.

Developing a critical mindset

A key component of media literacy is fostering a questioning attitude towards online content. Students should adopt a habit of critical inquiry, asking fundamental questions about any piece of information they encounter.

Who created this information?

Investigate the author's credentials, affiliations, and potential biases.

What is the main claim?

Determine whether the claim is supported by credible evidence.

When was this published?

Assess the relevance and timeliness of the information.

Where did this originate?

Consider whether the source is reputable and has a history of accurate reporting.

Why was this information created?

Identify whether the intent is to inform, persuade, entertain, or manipulate.

Mastering fact-checking techniques

Evaluating the credibility of information sources is paramount in navigating the digital age. Students should learn to critically assess sources by considering several key factors.

First, establishing the authority of the source is crucial. Students should investigate the credentials and expertise of the author or organization behind the information.

- ◆◆ Are they recognized experts in the field?
- ◆◆ Do they have relevant qualifications and experience?
- ◆◆ Is the organization known for its accuracy and reliability?
- ◆◆ Does the organization have a history of bias or misinformation?

Secondly, **assessing the accuracy of the information** is essential. Students should carefully examine the evidence presented, looking for supporting data, research studies, expert opinions, and credible sources. They should also check for inconsistencies or contradictions within the information itself or with information from other reliable sources.

Thirdly, **objectivity** plays a crucial role. Students should consider the potential motivations of the source and whether they have any vested interests in presenting a particular viewpoint. They should look for signs of bias, such as strong language, emotional appeals, or a lack of balanced perspectives.

Furthermore, **currency** is a significant factor. Students should consider when the information was published and whether it remains relevant in the current context. Rapidly evolving fields require up-to-date information, while historical information may still be relevant in certain contexts.

Finally, **coverage** should be considered. Does the source provide a balanced and comprehensive overview of the topic, or does it present a limited or biased perspective? Students should look for evidence of thorough research, consideration of multiple viewpoints, and a fair representation of different perspectives.



Cross-Referencing and Lateral Reading: Beyond evaluating individual sources, students should learn to cross-reference information from multiple reliable sources to identify inconsistencies or biases. This involves comparing information from different sources to see if they align or contradict each other. By practicing lateral reading, students can develop the critical thinking skills necessary to navigate the complex information landscape and avoid being misled by misinformation.

Furthermore, the technique of "lateral reading" is crucial. Instead of diving deeper into the initial website, students should navigate away from it to investigate the source and its credibility. This involves:

Checking the source:

Researching the website's author or organization. Identify any potential bias or messaging associated with the organization.

Conducting a web search:

Use keywords from the initial source to search for information about the author, the organization, and the claims made in the article.

Looking for corroborating evidence:

Search for information from other reputable sources that supports or contradicts the claims made in the initial article.

Checking for fact-checking websites:

Utilize resources like Snopes, PolitiFact, and FactCheck.org to verify the accuracy of the information.

5.2: FACT CHECKING AND VERIFICATION

Utilizing online tools

In today's digital age, information flows in at an unprecedented pace from a multitude of sources. While this abundance of content can foster learning, creativity, and global awareness, it also presents significant challenges. Students are not only bombarded with meticulously researched news articles and academic studies but also with rapidly shared social media posts, viral images, and videos—many of which lack proper verification or may even be intentionally misleading. This overwhelming influx of information can make it difficult to discern reliable facts from unfounded claims or outright falsehoods.

Given this landscape, it becomes imperative for students to be equipped with a robust set of digital verification tools and critical thinking skills. These tools—ranging from reverse image searches and dedicated fact-checking platforms to browser extensions and social media analysis apps—serve as essential filters that help sift through the noise. By leveraging these resources, students can effectively evaluate the credibility of sources, cross-reference information across multiple platforms, and ultimately make informed decisions about which content to trust. This proactive approach not only enhances their digital literacy but also empowers them to navigate the complexities of online information with confidence and discernment.



Reverse image search and visual analysis techniques

Unveiling the truth behind images

Visuals play a powerful role in shaping our perception of information. However, with advancements in technology, even images can be manipulated to deceive. This subsection empowers students to become discerning viewers by introducing them to techniques for analyzing and verifying the authenticity of images.

Google Reverse Image Search & TinEye

These powerful tools allow students to upload an image or provide a web address and conduct a reverse image search. This search scours the internet for similar images, helping students identify the original source and potential manipulations. For instance, if a student encounters an image shared online with a sensational headline, they can use a reverse image search to see if the image appears elsewhere with a different context or caption.

Video Analysis Tools and Detecting Deepfakes

The rise of deepfakes, which are manipulated videos that can realistically make someone appear to say or do something they never did, necessitates the use of video analysis tools. While some deepfakes are sophisticated and require advanced detection methods, students can be introduced to resources that analyze subtle inconsistencies in facial features, blinking patterns, and lighting to identify potential manipulation.

Fact-checking platforms and their effective use

Separating Fact from Fiction

Fact-checking websites play a critical role in verifying information and debunking misinformation. This subsection introduces students to reputable fact-checking platforms and equips them with the skills to leverage these resources effectively.

Snopes, PolitiFact, and FactCheck.org

These established fact-checking websites employ journalists and researchers to verify claims made in news articles, social media posts, and other online content. Students will learn how to navigate these platforms to search for claims they encounter online and see if they have been fact-checked. Additionally, they will be guided on how to evaluate the evidence presented by fact-checking websites to understand the reasoning behind their conclusions.

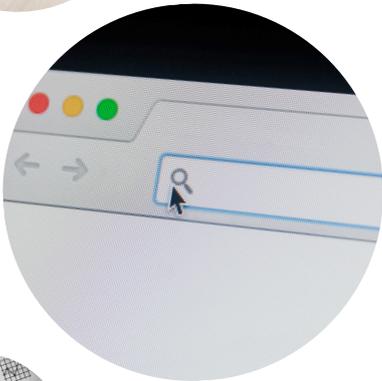
Guiding Effective Use

Simply knowing about fact-checking websites is not enough. This section will delve into effective utilization of these resources. Students will learn how to properly formulate search queries to find relevant fact-checks, how to assess the credibility of the fact-checking website itself, and how to interpret the different ratings used by these platforms (e.g., "True," "Mostly True," "False").

Browser extensions and other verification tools

Building Your Digital Verification Arsenal

Beyond the tools mentioned above, a vast array of resources exists to aid in online verification. This subsection introduces students to a wider range of verification tools that can be incorporated into their digital toolbox.



Browser Extensions for Enhanced Verification

Several browser extensions, like Media Bias/Fact Check Extension or Cheker – the Fact Check Extension can be installed to provide real-time credibility ratings for news websites visited by the user. These extensions often analyze factors such as the website's ownership, transparency, and history of publishing factual content. Students will learn how to install and utilize such extensions to gain immediate insights into the credibility of a news source they encounter online.

Hoaxy & BBC Reality Check

These tools track the spread of information across social media, allowing students to visualize how misinformation circulates. Hoaxy maps out the diffusion of stories across Twitter, highlighting interactions between real users and bots. BBC Reality Check, the BBC's disinformation debunking service.

THE CHINESE WHISPERS GAME

Practical Activity 1 (OFFLINE)

Objective:

This activity allows students to experience firsthand how easily information can be distorted and emphasizes the importance of critical thinking and verification before sharing information online.

Learning objectives:

- ◆ Understand how information can be misconstrued or twisted when passed from person to person.
- ◆ Recognize the importance of verifying information before sharing it.
- ◆ Develop critical thinking skills to evaluate the credibility of news sources.

Activity instructions:

Introduction (5 minutes):

- Briefly introduce the concept of fake news and disinformation, explaining how it can spread misinformation and mislead people.
- Explain the activity as a simulation of how rumors and fake news travel.

Chinese Whispers Game (15 minutes):

- Instruct students to form a line, standing shoulder-to-shoulder.
- Whisper a clear, concise sentence related to current events or a well-known story (e.g., “The principal is giving out free pizza today”) to the first student in the line.
- The first student whispers what they heard to the second student in line, and so on, until the message reaches the last student.
- The last student stands up and announces the sentence they heard out loud to the entire class.

Debrief and Discussion (20 minutes):

- Compare the original sentence to the final version announced by the last student.
- Discuss how the message changed throughout the line.
- Ask students why the message might have been altered (e.g., mishearing, misremembering, adding details).
- Relate this game to how fake news and disinformation spreads online.
- Emphasize how information can be unintentionally or intentionally twisted as it is shared from person to person or on social media.

Critical Thinking Strategies (10 minutes):
Brainstorm as a class different strategies students can use to evaluate the credibility of information they encounter online.

Assessment:

- Observe student participation in the discussion and role-playing activity.
- Engage in informal discussions to assess students' understanding of the concepts of fake news and disinformation.

- Examples:
 - Check the source of the information. Is it a reputable news organization or a personal blog?
 - Look for evidence to support the claims being made.
 - Be wary of sensational headlines or emotionally charged language.
 - Consider if the information aligns with what you already know about the topic.

- ◆◆ **Wrap-Up (5 minutes):**
Summarize the key takeaways from the activity.
- ◆◆ Remind students to be critical consumers of information and to verify information before sharing it online.

Differentiation:

- For younger students, you can use simpler sentences or phrases for the telephone game.
- For older students, you can provide them with a more complex news story or event to whisper in the telephone game.
- You can also encourage them to research different fact-checking websites and tools.

Fact or Fiction: News Headline Challenge

Practical Activity
(ONLINE)

Both the online and digital-free activities can be accessed on: <https://wiseme.eu/module5-students-en/>

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- International Federation of Library Associations and Institutions (IFLA). <https://www.ifla.org/>
- Links of interests
- Snopes: <https://www.snopes.com>
- A well-established fact-checking website that investigates and debunks urban legends, rumors, and misinformation.
- PolitiFact: <https://www.politifact.com>
- A fact-checking platform focused on political claims, offering detailed explanations and evidence-based verdicts on current issues.
- FactCheck.org: <https://www.factcheck.org>
- A non-partisan website dedicated to checking the factual accuracy of political news and statements.
- Google Reverse Image Search: <https://images.google.com/>
- A tool that allows users to search by image, helping verify the origins and authenticity of visual content.
- TinEye: <https://tineye.com>
- Another reverse image search tool that assists in identifying image sources and detecting alterations or misappropriations.
- NewsGuard: <https://www.newsguardtech.com>
- A browser extension that provides credibility ratings for news websites based on journalistic standards and transparency.
- Hoaxy: <http://hoaxy.iuni.iu.edu/>
- A tool that visually maps the spread of information (and misinformation) on Twitter, highlighting interactions between users and bots.
- CrowdTangle: <https://www.crowdtangle.com>
- A platform used to track and analyze the spread of content on social media platforms like Facebook, Instagram, and Reddit.



MODULE 6: APPLY THIS KNOWLEDGE TO YOUR AREA

MODULE OVERVIEW

This module is designed to introduce adolescents aged 12-17 to the concepts of **disinformation** and **fake news**, through an understanding of information disorders. It aims to equip them with the critical thinking skills needed to identify and evaluate information, and to promote responsible digital citizenship.

MODULE OBJECTIVES

Upon completion of this module students will be able to:

- ◆◆ Implement social media in the classroom from the right perspective
- ◆◆ Use social media in the classroom in a safely and effectively.
- ◆◆ Introduce the use of social media to counter disinformation no matter what your area or subject is
- ◆◆ Create a classroom PLE that will help you to teach your students all the module learning materials.

STRUCTURE OF THE MODULE

- ◆◆ 6.1: How can we make social media work for us in the classroom?
- ◆◆ 6.2: Implementing a personal learning environment using social media
- ◆◆ 6.3: Using our PLE in social media to combat disinformation
- ◆◆ 6.4: Projects and activities to inspire you

6.1: HOW CAN WE MAKE SOCIAL MEDIA WORK FOR US IN THE CLASSROOM?

Until very recently, it would have seemed inconceivable that a tweet or an Instagram post could serve as a teaching tool. Nevertheless, in the past few years, the incorporation of social media in education has emerged as a vital resource for learning, particularly for adolescents.

The impact of social media on education is irrefutable. It has not only changed how students interact with one another and their teachers but has also created new avenues for collaborative learning, knowledge exchange, and the enhancement of digital skills. However, it's important to remember that there are some challenges involved with using it, so it is essential to understand how we can maximize its benefits while minimizing its disadvantages.

The utilization of social media in educational settings encompasses the ways in which students engage with content as well as the methods educators employ to create and disseminate their instructional resources. Personal Learning Environments (PLEs) offer the most effective methodological approach for integrating social media in the classroom. PLEs provide a structured framework that maximizes the benefits of social media while mitigating its potential risks. Let's see how it can be used successfully in the classroom.

6.2. IMPLEMENTING A PERSONAL LEARNING ENVIRONMENT USING SOCIAL MEDIA

Implementing a Personal Learning Environment (PLE) using social media in the classroom can create an engaging and effective learning scenario to achieve the objective of using social media to counter disinformation (remember that you have all the information about a PLE in the Module 2). It is important to note that a PLE could be created within the integration of several digital tools and applications that can be brought together in a unique application such as Symbaloo (more info: [Six ways to use Symbaloo in your classroom](#)). However, in this case we will focus on how to create a PLE with social media platforms.

Here's how teachers can manage this approach while maintaining a dedicated class social media account:

Setting up the PLE

- ◆ Choose a platform: Select a social media platform that best suits your educational goals. It is recommended to use the social platforms most used by your students, so that they can discover good practices in addition to their usual informal use. As far as we know, Instagram and TikTok are the most used.
- ◆ Create a class account: Set up a dedicated class account, rather than allowing students to use personal profiles. This ensures a controlled environment and protects student privacy.

- ◆ Start creating the PLE by following profiles that are of interest to your students. Remember that the value of the PLE you create lies in the value of the profiles you follow that will support your students. By following profiles with high pedagogical value, the timeline of the platform will be filled with fascinating content for your students' learning. Here are some interesting accounts to follow when we start using Instagram to create our PLE:

General accounts: @nasa; @noaafisheries; @natgeo; @amnh; @tech

Teachers accounts: @mathgiraffe; @headoverheelsforteaching; @iteachalgebra; @madlylearning; @social_studies_success

- ◆ Establish clear guidelines: Develop and communicate rules for social media use in the classroom. For example:
 - Only use the class account during designated times
 - All posts must be related to course content
 - Respect others' opinions and maintain a positive tone
 - Establish shifts of students to be in charge of the account, evaluating their collaboration with a specific rubric (language, synthesis, visual elements used, etc.) in this way they will develop digital competences.

Implementing the PLE:

Content Creation and

Sharing: Encourage students to create and share content related to your subject:

- Post summaries of key concepts learned in class.
- Share relevant articles, videos, or resources they find.
- Create and share infographics or visual representations of course material.
- Ask your students to create digital material (pictures, videos, posters, etc.) to be uploaded to the class account as a learning outcome. Making their work visible beyond the classroom walls will also be a motivating element.

Collaboration and

Discussion: Use the social media platform to facilitate collaboration:

- Create discussion threads on course topics.
- Encourage students to comment on and engage with each other's posts.
- Use hashtags to organize discussions around specific themes or units.

afsnitstekst

Research and Information

Gathering: Teach students to use social media as a research tool:

- Follow relevant experts, organizations, or news sources.
- Use the platform's search function to find information on course-related topics or activities.
- Evaluate the credibility of sources found on social media.

- ◆ Rotate responsibilities: Assign students or committees to manage different aspects of the class account, gradually releasing responsibility as they become more proficient.
- ◆ Monitor activity: Regularly review contributions and interactions to ensure that they are in line with educational goals and guidelines. You can set up a co-evaluation process in which students evaluate themselves as they follow instructions for good practice.
- ◆ Integrate with formal learning: Use the PLE to complement and extend classroom activities. For example, post homework reminders or share additional resources related to in-class discussions.
- ◆ Encourage reflection: Prompt students to reflect on how the PLE is impacting their learning process and digital literacy skills.
- ◆ Model appropriate use: Demonstrate how to use social media effectively for learning by actively participating in the class account

6.3. USING OUR PLE IN SOCIAL MEDIA TO COMBAT DISINFORMATION

Implementing a Personal Learning Environment (PLE) in social media to combat disinformation and fake news is a crucial skill, given the high percentage of students who already use social media. This situation makes it our responsibility as educators to integrate these issues into the classroom. Here's how teachers can implement this approach effectively:

Developing Critical Thinking

Skills: Teach students to critically evaluate information they encounter on social media related to your subject:

- Source Verification: Encourage students to check the credibility of sources by examining author credentials, publication date, and website reputation¹.
- Cross-referencing: Instruct students to verify information across multiple reliable sources before accepting it as fact².
- Fact-checking: Introduce students to reputable fact-checking websites and teach them how to use these tools effectively.

Curating Reliable Information

Sources: Guide students in creating a curated list of trustworthy sources on social media related to your subject or area:

- Follow reputable news organizations, academic institutions, and verified experts in relevant fields.
- Create Instagram lists focused on specific topics to streamline access to quality information.
- Use social bookmarking tools to save and organize credible sources for easy reference.

Collaborative Fact-Checking:

Encourage students to work together in identifying and debunking misinformation:

- Create a class hashtag for sharing and discussing potentially false information found online.
- Assign group projects where students collaboratively investigate viral social media claims and present their findings.
- Use collaborative tools like shared documents or wikis to compile a class database of debunked myths and reliable sources.

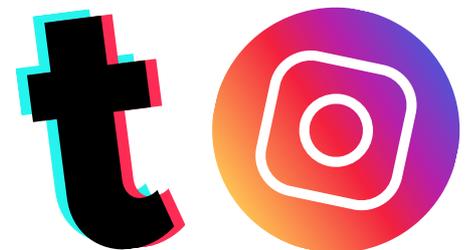
6.4. PROJECTS AND ACTIVITIES TO INSPIRE YOU

Instagram Activities

- **Fact-Check Carousel Posts:** Students create multi-slide carousel posts debunking viral claims. Each slide can focus on a different aspect of the fact-checking process, such as source verification, cross-referencing, and providing accurate information. Use this source: <https://newslit.org/educators/resources/fact-check-it/>
- **"Is This Legit?" Stories:** Encourage students to use Instagram's interactive story features (polls, quizzes) to engage followers in critically evaluating viral posts. They can present a claim and ask followers to vote on its authenticity before revealing the fact-check. Use this source: <https://www.poynter.org/mediawise/ifcd-2024/teach-with-fact-checking-lesson-plans/>
- **IGTV Explainer Videos:** Students produce longer-form videos explaining complex topics or debunking persistent myths, using Instagram's IGTV feature to provide in-depth analysis. Use this source: <https://www.pbs.org/newshour/classroom/lesson-plans/2023/01/lesson-plan-how-to-fact-check-the-fact-pages-on-instagram>

TikTok Activities

- **Kinetic Typography Videos:** Students create engaging videos describing the five types of misinformation using kinetic typography, a technique that combines motion and text to convey information visually. Use this source: <https://www.infotoday.com/cilmag/may22/Winnick--Teaching-TikTok-to-Help-Counter-Misinformation.shtml>
- **"Debunk in 60 Seconds" Challenge:** Inspired by TikTok's short-form content, students create concise videos fact-checking claims in under a minute, using catchy music and transitions to maintain viewer interest. Use this source: <https://home.edweb.net/webinar/newsliteracy20241114/>
- **Duet Fact-Checks:** Utilize TikTok's duet feature to directly respond to and fact-check viral misinformation. Students can create side-by-side videos providing correct information or context. Use this source: <https://newslit.org/updates/teach-with-tiktok-help-students-stick-to-the-facts-on-social-media/>
- **Trending Sound Fact-Checks:** Students repurpose popular TikTok sounds or trends to create fact-checking content, making it more likely to appear on users' For You pages. Use this source: <https://home.edweb.net/webinar/newsliteracy20241114/>
- **Behind-the-Scenes Fact-Checking:** Students document their fact-checking process, showing how they use tools like reverse image search or source verification, to educate viewers on digital literacy skills. Use this source: <https://www.pbs.org/newshour/classroom/lesson-plans/2024/03/how2internet-how-to-produce-a-fact-check-video>



Projects to inspire you or your students

Media Wise

<https://www.poynter.org/mediawise/>

Tik Tok Media Wise:

<https://www.tiktok.com/@mediawise>

Instagram Media Wise:

<https://www.instagram.com/mediawise/?hl=es>

X Media Wise: <https://x.com/mediawise>

Student Reporting Lab

<https://studentreportinglabs.org/about/>

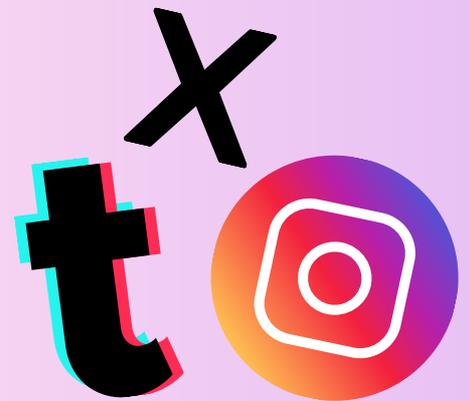
Tik Tok Student Reporting Lab:

<https://www.tiktok.com/@reportinglabs>

Instagram Student Reporting Lab:

<https://www.instagram.com/studentreportinglabs/?hl=en>

X Student Reporting Lab: <https://x.com/ReportingLabs>



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MODULE 6: APPLY THIS KNOWLEDGE TO YOUR AREA

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- **Korhonen, A. M., Ruhaalahti, S., & Veermans, M. (2019).** The online learning process and scaffolding in student teachers' personal learning environments. *Education and Information Technologies*, **24(1)**, 755-779. <https://doi.org/10.1007/s10639-018-9793->
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- <https://doi.org/10.15405/epsbs.2019.08.02.91>
- **The British School in Barcelona. (2024).** The use of social media in education. Available in: <https://www.britishschoolbarcelona.com/blog/the-use-of-social-media-in-education/>



MODULE 7: WISEME INTO PRACTICE: ACTIVITIES TO BE IMPLEMENTED IN CLASS

MODULE OVERVIEW

This module is designed to help teachers apply all the information from the previous modules through activities. Teachers will find two types of activities: offline activities, which can be carried out in the classroom at any time without the need for any equipment or internet connection; and online activities, which are activities to be carried out from connected devices. These online activities are described in this module, although some of them will be interactively accessible on the Wise-Me platform.

MODULE OBJECTIVES

The aims of this module are to:

- ◆◆ To help teachers put into practice the material covered in the modules.
- ◆◆ To support teachers through practical and participative dynamics.
- ◆◆ To guide students in learning by doing with materials that help them to develop their critical skills in using social networks to deal with misinformation

STRUCTURE OF THE MODULE

- ◆◆ 7.1. Activities related to module 1: Introduction to misinformation and fake news
- ◆◆ 7.2. Activities related to module 2: Social media and information consumption
- ◆◆ 7.3. Activities related to module 3: Psychological and emotional reactions to misinformation
- ◆◆ 7.4. Activities related to module 4: Ethical considerations and responsible information sharing
- ◆◆ 7.5. Activities related to module 5: Identifying fake news and disinformation



Disinformation Bingo

Practical Activity 1 (OFFLINE)

Objective:

To reinforce the concepts of misinformation and fake news in a fun and engaging way.

Instructions:

1. Create Bingo Cards:
 - Distribute blank bingo cards to each student.
 - Have students fill in the squares with terms from the module, such as "clickbait," "conspiracy theory," "fact-checking," "emotional appeal," and "confirmation bias."
2. Call Out Clues:
 - The teacher or a designated student reads clues or statements related to misinformation.
 - For example: "A headline that is designed to shock or outrage."

Materials:

- Bingo cards with a variety of concepts all related to the module 1 (see Annex 1) .
- Markers or bingo chips.
- A list of clues or statements related to misinformation from the module.

3. Mark the Cards:
 - Students mark the corresponding square on their bingo card if the clue matches a term on their card.
4. Winning the Game:
 - The first student to mark five squares in a row (horizontally, vertically, or diagonally) calls out "Bingo!" and checks their answers with the teacher.

Disinformation Detectives

Practical Activity 2 (ONLINE)

The online activity can be accessed on: <https://wiseme.eu/module1-students-en/>

Annex 1

CARD 1

DISINFORMATION BINGO			
MISINFORMATION	DECEPTIVE HEADLINES	MAL-INFORMATION	
MESSAGE	BIAS	BOT ACCOUNTS	
OBJECTIVITY	HOAX	CLICKBAIT	
TRUSTWORTHY	ECHO CHAMBERS	AGENT	

CARD 2

DISINFORMATION BINGO			
FAKE NEWS	DISINFORMATION	AGENT	
FACT	CLICKBAIT	TRUSTWORTHY	
BIAS	MISLEADING VISUALS	INFODEMIC	
MAL-INFORMATION	SATIRE OR PARODY	MESSAGE	

CARD 3

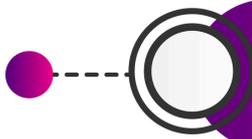
DISINFORMATION BINGO			
COGNITIVE BIASES	CONSPIRACY THEORIES	EMOTIONAL MANIPULATION	
SATIRE OR PARODY	ECHO CHAMBERS	INFORMATION	
TRUSTWORTHY	OBJECTIVITY	AGENT	
MISINFORMATION	DECEPTIVE HEADLINES	MAL-INFORMATION	

CARD 4

DISINFORMATION BINGO			
MAL-INFORMATION	DECEPTIVE HEADLINES	ECHO CHAMBERS	
HOAX	DIGITAL LITERACY	FALSE CONNECTION	
FAKE NEWS	SATIRE OR PARODY	MESSAGE	
MANIPULATED CONTENT	BOT ACCOUNTS	INTERPRETER	

CARD 5

DISINFORMATION BINGO			
DISINFORMATION	EMOTIONAL MANIPULATION	MISINFORMATION	
MANIPULATED CONTENT	BOT ACCOUNTS	INTERPRETER	
CLICKBAIT	CONSPIRACY THEORIES	DIGITAL LITERACY	
HOAX	BIAS	FALSE CONNECTION	



MODULE 2: SOCIAL MEDIA AND INFORMATION CONSUMPTION

Fact-Checking a Viral Claim

Practical Activity 1 (OFFLINE)



Objective

Teach students how to critically evaluate the credibility of online content:

- Develop their skills in identifying false or misleading information
- Familiarize students with fact-checking tools and techniques
- Encourage responsible sharing practices on social media.

Required Tools and Materials

1. Digital Tools (access to computers, tablets, or smartphones with internet connectivity)
 - Fact-checking websites (e.g., Snopes, FactCheck.org, PolitiFact)
 - Reverse image search tools (e.g., Google Images, TinEye)
 - Media bias and reliability checkers (e.g., AllSides, Media Bias/Fact Check)



Contents

- Understanding what constitutes credible information
- Exploring fact-checking tools and their applications
- Practical application of fact-checking strategies on a real-world example

2. Printed Materials:

- Worksheets for note-taking
- A curated set of viral claims (real and fabricated) for analysis

3. Whiteboard/projector for group discussions and demonstrations.

Activities

Step 1: Introduction (15 minutes)

Objective: establish foundational knowledge about fact-checking

- ◆◆ Briefly explain what fact-checking is and why it is important
- ◆◆ Use an example of a viral claim (e.g., a popular meme or news story) to illustrate how misinformation spreads
- ◆◆ Discuss the consequences of sharing false information

Interactive Question: have you ever shared something online that turned out to be false? How did it feel?

Step 2: Familiarize Students with Tools (20 minutes)

Objective: equip students with knowledge of fact-checking tools

Demonstrate how to use:

- ◆◆ Snopes or similar platforms to investigate the credibility of claims
- ◆◆ Google Reverse Image Search to verify the source of an image
- ◆◆ AllSides to check for bias in news reporting

Show students how to identify credible sources by looking for:

- ◆◆ Author credentials
- ◆◆ Reputable organizations
- ◆◆ Evidence and citations

Hands-On Activity: practice using one tool with a simple example (e.g., searching if “Humans only use 10% of their brain” is true or false).

Step 3: Group Fact-Checking Challenge (30 minutes)

Objective: allow students to apply their knowledge in a collaborative setting

- ◆◆ Divide students into small groups (3-4 per group)
- ◆◆ Assign each group one viral claim to investigate.
Examples: a sensational headline (“Aliens Discovered on Mars!”) / A widely circulated image (“Sharks swimming on a flooded highway”) / A controversial political statement
- ◆◆ Both claims to be investigated and the tools to be used have to be different for each group
- ◆◆ Provide each group with a worksheet to document their process:
 - 1.Claim: write down the claim they’re analyzing
 - 2.Source Check: investigate the website or person sharing the claim
 - 3.Checking Tools: use Snopes, reverse search, etc., to verify the claim
 - 4.Conclusion: determine if the claim is true, false, or misleading

Expected Outcome: groups should provide a reasoned explanation for their conclusion.

Wrap-Up Tips:

- ◆◆ Emphasize the importance of stopping and thinking before sharing content
- ◆◆ Encourage students to share fact-checking tips with family and friends.

Step 4: Group Presentations (20 minutes)

Objective: share findings and reinforce learning.

- ◆◆ Each group presents their assigned claim, their fact-checking process, and their conclusion
- ◆◆ Encourage other groups to ask questions or add observations
- ◆◆ Highlight strong examples of critical thinking and teamwork

Step 5: Reflection and Discussion (15 minutes)

Objective: reinforce lessons and discuss broader implications

Discussion Prompts:

- ◆◆ “What was the most surprising thing you learned during this activity?”
- ◆◆ “How can you apply these skills in your everyday life?”
- ◆◆ “What should you do if you’re unsure whether something is true?”

Assessment and Follow-Up

- ◆◆ Collect and review worksheets to assess understanding of the fact-checking process
- ◆◆ Assign homework: students choose a viral post or news article at home and fact-check it using the tools they learned
- ◆◆ Follow up with a class discussion on their findings.

Spot and Draw: Detecting Bias and Manipulation

Practical Activity 2 (OFFLINE)

Objective

- Familiarize students with key terms related to biased or manipulative content
- Reinforce understanding of these terms through a fun, interactive word search
- Encourage creativity by allowing students to illustrate their understanding of bias detection

Contents

- This activity not only reinforces vocabulary and critical thinking skills but also engages students in a creative way to visualize the concepts, making them more memorable and meaningful
- The learners' task is to find and select the words in the grid. The words may be arranged horizontally, vertically, diagonally, or backward.

Activities

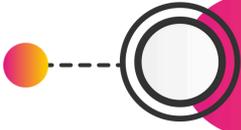
These are the terms directly related to identifying biased or manipulative contents to be detected:

1. Bias
2. Manipulation
3. Misinformation
4. Source
5. Credibility
6. Fact
7. Opinion
8. Headline
9. Context
10. Verify
11. Clickbait
12. Stereotype
13. Emotion
14. Framing
15. Agenda

Here's a sample grid layout for reference:

BIASETOPINION
AGENDAXVERIFY
MANIPULATION
IMISINFORMATI
SCREDIBILITYO
HLCLICKBAITTN
EOSTEREOTYPET
ANOCONTEXTKEI
DEMOTIONALSES

The online activity can be accessed on: <https://wiseme.eu/module2-students-en/>



MODULE 3: PSYCHOLOGICAL AND EMOTIONAL REACTIONS TO MISINFORMATION

KNOW AND MANAGE YOUR HABITS USING SOCIAL MEDIA

Practical Activity 1 (OFFLINE)

Objective:

Help students identify and reflect on their social media habits to promote more conscious and responsible usage.

Instructions:

1. Introduction (5 minutes)

- Begin with a brief discussion about social media habits. Ask students to share what platforms they use most frequently and why. Discuss common habits, such as scrolling mindlessly, sharing content without verification, or comparing themselves to others.

Materials:

- Journals or paper
- Pens or pencils
- A whiteboard or chart paper
- Sticky notes

2. Habit Reflection (10 minutes)

Prompt students to spend a few minutes writing in their journals about their social media usage.

Encourage them to consider the following questions:

- How much time do you spend on social media each day?
- What types of content do you engage with (videos, articles, posts)?
- What content do you post/share yourself?
- What is the goal you are seeking when posting/sharing posts on social media?
- Do you consider the possible impacts of posting/sharing posts on social media (how the other might feel about it, what the post could evoke in others)?
- How do you feel before and after using social media?
- Do you often find yourself sharing content without checking its reliability?



3. Group Discussion (15 minutes)

- Form small groups (4-5 students each) and have them share their reflections with one another. Encourage them to discuss common themes, positive habits, and habits they want to change. Assign each group a sticky note color to note down key takeaways or insights from their discussions.

4. Class Discussion and Creating a Habit Chart (10 minutes)

- On a whiteboard or chart paper, create a "Social Media Habits" chart with two columns: "Positive Habits" and "Habits to Change." Have each group share 2 to 4 (depending on number of groups) positive habit and one habit they want to change. Write these in the appropriate columns.
- Make students discuss the most relevant habits and make them debate what habits they mostly follow, and make them reflect on it.

5. (optional) Developing Personal Action Plans (10 minutes)

- Ask students to create a personal action plan for using social media more consciously. They can set specific goals, such as limiting time spent on platforms, verifying sources before sharing, or engaging with content that uplifts them.

6. Closing Reflection (5 minutes)

- Conclude with a class discussion about the insights gained and the importance of being mindful of social media habits. Encourage students to commit to their action plans and support one another in their goals.

Assessment:

- Monitor group discussions for engagement and understanding.
- Review the habit chart for common themes.

Follow-Up:

- Encourage students to revisit their action plans after a set period (e.g., one month) to reflect on their progress and make any necessary adjustments.

UNDERSTAND YOUR FEELINGS TO DEVELOP SELF-AWARENESS SKILLS

Practical Activity 2 (OFFLINE)

Objective:

The exercise is designed to help students understand their own emotions and develop one of the key components of self-awareness skills. It will help students identify and manage their emotional responses to social media content. The ability to identify own emotions is a crucial skill for managing emotional responses to social media content and for building healthy relationships in the online and offline world. For more detail see the social-emotional learning SEL in Module 3.

The exercise could also be used in foreign language classes to learn new vocabulary concerning emotions and feelings.

The exercise could be modified for art class by using drawing or abstractions (colour etc.) for depicting the feelings.

Instructions:

1. Introduction (5 minutes)

- Begin with a brief discussion on how social media can influence emotions. Ask students to share any experiences where they felt a strong emotion after viewing or reading something online.
- For introduction a short TikTok video could be shown to the class for inspiration:

[TikTok video link](#)

2. Exploration (10 minutes)

- Display various social media posts (fictional and appropriate) that might provoke different emotional reactions (e.g., excitement, anger, sadness). Ensure a variety of content is shown.

Materials:

- Social media posts (fictional and appropriate) that might provoke different emotional reactions (see examples in the materials)
- Projector or screen for displaying content (posts could also be printed on paper and handed to the groups of students)
- Copies of a "Feelings Wheel" or emotion chart
- Journals or paper for writing
- Additional: PC connected to the internet and projector to show introduction on TikTok or YouTube video (see links below)

3. Group Discussion (10 minutes)

- Divide the class into small groups. Provide each group with a "Emotion Wheel" (2) or emotion chart.
- Ask them to identify the emotions they might feel when they see each type of content presented.
- (optional) Make students Create an on-line word cloud from the

4. Self-Reflection (10 minutes)

- Have students individually reflect and write in their journals about a recent social media interaction that triggered a strong emotion. Encourage them to explore why it affected them.

(2)The Emotion Wheel was created by Robert Plutchik to help patients identify and describe the 8 core emotions: Joy, Sadness, Fear, Anger, Anticipation, Surprise, Disgust, and Trust.



5. (optional) Mindfulness Practice (5 minutes)

- Lead a short mindfulness exercise focused on breathing, encouraging students to practice calming techniques when they encounter emotional content online.

6. Closing Discussion (5 minutes)

- Come back together as a class and discuss strategies for managing emotional responses in a healthy way.
- Encourage students to share insights and strategies they have learned.
- Teacher can discuss with students specific situations, people, or events that trigger strong emotional responses can help in developing coping strategies for future encounters.
- Point out to students that they should refer to emotions as "comfortable" and "uncomfortable" (and not as "positive/good" and "negative/bad"). Remind students that all emotions, both "comfortable" and "uncomfortable", provide to us valuable information.

Assessment:

- Monitor group discussions for understanding.
- Review journal entries to ensure students are recognizing and exploring their emotions.

Follow-Up:

- Encourage students to apply these reflection techniques during their personal social media use over the next week and discuss changes they observe in their reactions.
- Stress that it is okay to feel emotion or be excited about something; the goal here is for students to be able to reflect on their emotions.
- Remind students that all emotions, both "comfortable" and "uncomfortable", provide to us valuable information.
- Encouraging students to talk to friends, family, or a mental health professional about their emotions and the effects of social media. This can provide comfort and perspective, helping to process emotions in a supportive environment.

ADDITIONAL MATERIALS

Annex: Emotion Wheel

Annex: Set of social media posts to reflect upon the feelings

We are working on these materials so they could be used for translation

Additional definitions for the exercise:

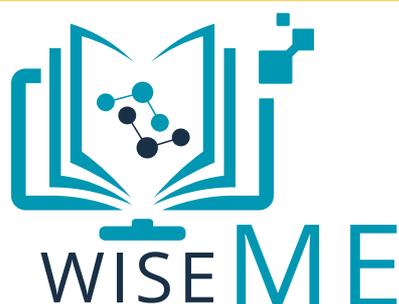
Feelings are subjective experiences that arise from specific emotions and reflect personal interpretations of emotional responses. They are influenced by individual thoughts and experiences.

Emotions, on the other hand, are physiological responses to stimuli, often characterized by distinct physical reactions and expressions. Emotions are generally more automatic and can include basic states like joy, anger, fear, and sadness.

In summary, emotions are the initial reactions to stimuli, while feelings are the personal, internal experiences that arise from those emotions.

Definitions for each of Robert Plutchik's eight primary emotions:

1. Joy: A feeling of great pleasure and happiness. It often arises from positive experiences, achievements, or fulfilling relationships.
2. Trust: A sense of security and reliability in someone or something. It is the foundation of healthy relationships, fostering openness and connection.
3. Fear: An emotional response to perceived threats or danger. It serves as a protective mechanism, prompting individuals to react to protect themselves.
4. Surprise: A brief emotional response to an unexpected event or situation. It can be positive or negative and often leads to curiosity or shock.
5. Sadness: An emotional state characterized by feelings of loss, disappointment, or sorrow. It often prompts introspection and a desire for comfort.
6. Disgust: A strong feeling of aversion or repulsion towards something considered unpleasant or offensive. It serves as a protective response to avoid harmful substances or situations.
7. Anger: An emotional response to perceived injustice, frustration, or threat. It can motivate assertive actions but can also lead to destructive behaviors if not managed appropriately.
8. Anticipation: A feeling of excitement or expectation about a future event. It can generate enthusiasm or anxiety, depending on the context and outcome expected.



LEARN TO COPE WITH DIFFICULT SITUATIONS

Practical Activity 3 (OFFLINE)

Objective:

Help students understand and reflect on the importance of accepting mistakes, asking for help, and recognizing that it's okay to have feelings or not to know everything. Challenging negative thoughts and reframing them into a more positive or realistic perspective can help reduce emotional distress. This exercise creates a comfortable space for mental health and show students how they can deal with difficult situations.

Instructions:

1. Introduction (10 minutes)

- Begin with a brief discussion about the importance of making mistakes, seeking help, and acknowledging limitations. Ask students to share times when they felt unsure or experienced challenges and how they overcame them.

2. Group Formation (5 minutes)

- Divide the class into small groups of 4-5 students.

3. Group Brainstorming (15 minutes)

- Each group receives a large sheet of paper and is tasked with creating a mind map around the theme "It's Okay To...".
- Encourage them to brainstorm as many ideas as possible regarding what is acceptable in terms of mistakes, seeking help, or admitting uncertainty. The themes should be motivational, positive or seek solutions (see additional materials for examples).
- They can write down phrases, draw pictures, or use symbols to represent their ideas.

Assessment:

- Monitor group discussions and presentations to gauge understanding.
- Use students' reflections to assess their comfort with the themes explored.

Materials:

- Large sheets of paper or poster boards
- Markers, crayons, or colored pencils
- Sticky notes
- A timer

4. Reflection with Sticky Notes (10 minutes)

- After completing their mind maps, each student takes a sticky note and writes down a personal experience related to one of the ideas on their group's mind map (e.g., a time they made a mistake or asked for help).
- Students then place their sticky notes on their group's poster.

5. Presentations (10 minutes)

- Each group presents their mind map to the class, explaining their thoughts and sharing insights from the sticky notes.

6. Class Discussion (10 minutes)

- Facilitate a discussion where students share what they found most valuable from the exercise. Highlight common themes and emphasize the importance of understanding that struggling is part of learning.

7. Closing Activity (5 minutes)

- To wrap up, have students silently reflect and then share one takeaway from the exercise. This can be a sentence they write on a piece of paper or something they vocalize in a circle.

Follow-Up:

- Encourage students to keep their mind maps and revisit them in the future, reinforcing the idea that embracing mistakes and uncertainties is okay.
- The created mind maps could be placed on the class wall for future reference, or if there is time left, the class can create one map reflecting the outcomes of the group activity.

ADDITIONAL MATERIALS

Suggestions on how to lead students to create the mind map:

Design Concept for "It's Okay To..." Mind Map Chart

1. Central Circle:

- Place a large circle in the center labeled "It's Okay To..."

2. Branching Segments:

Create several thick lines extending from the central circle to smaller circles surrounding it. Each smaller circle can represent one of the main themes, such as:

- Be yourself
- Make Mistakes
- Ask for Help
- Not Know Everything
- Have hard days
- Feel your feelings
- To start over again

3. Sub-branches:

From each smaller circle, draw thinner lines branching out to more specific phrases or ideas related to the theme. The themes should be motivational, positive or seek solution.

For example, under "Make Mistakes," you might include:

- "It's a part of learning"
- "Everyone makes them"
- "Mistakes help us grow"

For example, under "Ask for Help," you might include:

- "Seek support to get help"
- "Talk to friend"
- "Talk to parents"

4. Visual Elements:

Use different colors for each theme to make it visually appealing.

Add illustrations or icons next to each theme. For example:

- A lightbulb for ideas
- A question mark for asking help
- A heart for support

5. Sticky Notes Section:

- Reserve a section on the chart for sticky notes, where students can later add their personal experiences related to the themes.
- This chart can be created on a large sheet of paper or on a whiteboard, allowing students to visually engage with the concepts as they brainstorm and reflect during the activity.

MINDFULNESS ACTIVITIES TO PROMOTE CONSCIOUS USE OF SOCIAL MEDIA

Practical Activity 4 (OFFLINE)

Objective:

Implementing these techniques can help students cultivate mindfulness, enhance emotional regulation, and improve their ability to critically assess information.

Instructions:

Concrete mindfulness techniques that can be effectively used in the classroom:

1. **Mindful Breathing:** Begin or end classes with a few minutes (could be 1-3 minutes) of deep breathing exercises. Students focus on their breath which helps center their thoughts:
 - Option 1: inhaling for a count of four, holding for four, and exhaling for four.
 - Option 2: deep slow inhaling to comfortable fullness, holding breath naturally till it feels comfortable, and deep slow exhaling.
2. **Body Scan:** Guide students in a body scan meditation, where they focus on different parts of their body, noticing any tension or discomfort. This practice can enhance self-awareness and relaxation

Materials:

- Class or outdoor environment

3. **Five Senses Exercise:** Encourage students to take a moment to observe their surroundings using all five senses. They can describe what they see, hear, smell, touch, and taste, fostering awareness of the present moment..
4. **Mindful Journaling:** Allocate time for students to write reflectively about their thoughts and feelings. Prompts like "What am I grateful for today?" or "What emotions am I experiencing right now?" can help students process their experiences.
5. **Gratitude Circle:** Create a space for students to share something they are grateful for, promoting positive emotions and a sense of community.
6. **Mindful Listening:** Pair students up and have one speak for a minute while the other listens without interrupting. Afterward, the listener summarizes what they heard, reinforcing focused attention and empathy.
7. **Nature Walks:** Organize outdoor walks where students can focus on the sights, sounds, and smells of nature, enhancing their connection to the environment and promoting relaxation.

Blame Game: Unpacking Social Media Manipulation" Spotting Scapegoating and Misleading Language in Social Media Posts

Practical Activity 5 (ONLINE)



The online activity can be accessed on: <https://wiseme.eu/module3-students-en/>

MODULE 4: ETHICAL CONSIDERATIONS AND RESPONSIBLE INFORMATION SHARING

The moral responsibility of sharing information online

Practical Activity 1 (OFFLINE)

Objectives

- Teach students to better understand the anatomy of clickbait headlines
- Familiarize students with fact-checking techniques and tools
- Encourage mindfulness to emotionally charged content
- Building resilience to manipulation and fostering critical thinking

Required Tools and Materials

- Digital Tools (access to computers, tablets, or smartphones with internet connectivity)
- Fact-checking websites (e.g., Snopes, FactCheck.org, PolitiFact)

Printed Materials

- Worksheets for note-taking
- A viral claim/headline (intentionally fabricated) for analysis
- Whiteboard/Project or for group discussions and demonstrations.

Activities

Step 1: Introduction (15 minutes)

- ◆ Introduce the concepts of **disinformation** and **malinformation**
- ◆ Begin with a brief discussion on what the difference between misinformation, disinformation, and malinformation is. Some questions to open the discussion:
 - ◆ *What was the most shocking headline you have ever heard?*
 - ◆ *What was the most unconventional thing a shocking headline made you do?*

Step 3: Teamwork (20 minutes)

- ◆ Divide the class into 3 groups performing different tasks on the visual and textual materials assigned as follows:
 - ◆ **Team A task:** Explore the technical quality of the images and make assumptions on their credibility
 - ◆ **Team B task:** Investigate the magazine credentials and responsible team
 - ◆ **Team C task:** Explore the linguistic features (grammar, syntax, style, punctuation) of the headline

Step 2: Provide the leading visual material (5 minutes)

- ◆◆ Show some hypothetical photos from a funeral of an extremely popular band singer declared deceased by a striking online magazine headline.

Step 4: Group presentations of the investigation tasks (5 minutes per team + a brief 3-minute discussion session after each team presentation; overall: 27 minutes)

Questions to be asked:

- ◆◆ *Are there any visual signs that the photos uploaded by the magazine are technically manipulated or intentionally fabricated by digital tools including AI?*
- ◆◆ *What online information could be found on the magazine reputation? Can you identify by their names, images and professional responsibilities the main members of the editorial team?*
- ◆◆ *Are there any peculiarities in terms of the verbal presentation of the information? Any grammar mistakes, word order imperfections, style variety?*

Step 5: Application of digitally based tools for information verification (10 minutes):

- ◆◆ Fact-checking websites (e.g., Snopes, FactCheck.org)
- ◆◆ Reverse image search tools (e.g., Google Images, TinEye)

Additional Information:

- ◆◆ *Assessment and Follow-Up*
Evaluate participation in teamwork and group discussions.
- ◆◆ *Evaluate the effectiveness of the information verification tools.*
- ◆◆ *Assess the human psyche driving mechanisms in a liminal situation.*

Step 6: Evaluation of the verification tools and closing discussion (10 minutes):

- ◆◆ *How would you feel if you knew from a clickbait headline that your favorite band leading singer was tragically deceased?*
- ◆◆ *What kind of irrational actions might an emotionally charged content foster?*
- ◆◆ *What the psychological and ethical damages from such a content might be?*
- ◆◆ *What rational fact-checking steps might we apply as a critical thinking approach to the headline?*

Creating a positive digital footprint

Practical Activity 5 (ONLINE)

The online activity can be accessed on: <https://wiseme.eu/module4-students-en/>

THE CHINESE WHISPERS GAME

**Practical Activity 1
(OFFLINE)**

Objective:

This activity allows students to experience firsthand how easily information can be distorted and emphasizes the importance of critical thinking and verification before sharing information online.

Learning objectives:

- ◆ Understand how information can be misconstrued or twisted when passed from person to person.
- ◆ Recognize the importance of verifying information before sharing it.
- ◆ Develop critical thinking skills to evaluate the credibility of news sources.

Activity instructions:

Introduction (5 minutes):

- Briefly introduce the concept of fake news and disinformation, explaining how it can spread misinformation and mislead people.
- Explain the activity as a simulation of how rumors and fake news travel.

Chinese Whispers Game (15 minutes):

- Instruct students to form a line, standing shoulder-to-shoulder.
- Whisper a clear, concise sentence related to current events or a well-known story (e.g., “The principal is giving out free pizza today”) to the first student in the line.
- The first student whispers what they heard to the second student in line, and so on, until the message reaches the last student.
- The last student stands up and announces the sentence they heard out loud to the entire class.



Debrief and Discussion (20 minutes):

- Compare the original sentence to the final version announced by the last student.
- Discuss how the message changed throughout the line.
- Ask students why the message might have been altered (e.g., mishearing, misremembering, adding details).
- Relate this game to how fake news and disinformation spreads online.
- Emphasize how information can be unintentionally or intentionally twisted as it is shared from person to person or on social media.

Critical Thinking Strategies (10 minutes):
Brainstorm as a class different strategies students can use to evaluate the credibility of information they encounter online.

Assessment:

- Observe student participation in the discussion and role-playing activity.
- Engage in informal discussions to assess students' understanding of the concepts of fake news and disinformation.

- Examples:
 - Check the source of the information. Is it a reputable news organization or a personal blog?
 - Look for evidence to support the claims being made.
 - Be wary of sensational headlines or emotionally charged language.
 - Consider if the information aligns with what you already know about the topic.

- ◆◆ **Wrap-Up (5 minutes):**
Summarize the key takeaways from the activity.
- ◆◆ Remind students to be critical consumers of information and to verify information before sharing it online.

Differentiation:

- For younger students, you can use simpler sentences or phrases for the telephone game.
- For older students, you can provide them with a more complex news story or event to whisper in the telephone game.
- You can also encourage them to research different fact-checking websites and tools.

Fact or Fiction: News Headline Challenge

Practical Activity 5 (ONLINE)

The online activity can be accessed on: <https://wiseme.eu/module5-students-en/>

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- **FactCheck.org:** <https://www.factcheck.org/>
- **PolitiFact:** <https://www.politifact.com/>
- **Google Reverse Image Search:** <https://images.google.com/>
- **TinEye:** <https://tineye.com/>
- **InVID:** <https://www.invid-project.eu/>
- **AllSides:** <https://www.allsides.com/unbiased-balanced-news>
- **Media Bias/Fact Check:** <https://mediabiasfactcheck.com/>
- **Whois Lookup:** <https://whois.domaintools.com/>
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- **Other sources**
- **ACTIVE Toolkit: Methodology for teachers providing other sources and perspectives for the covered topics** (<https://www.active-citizen.eu/active-results>)
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- **A well-established fact-checking website that investigates and debunks urban legends, rumors, and misinformation.**
- **PolitiFact:** <https://www.politifact.com>
- **A fact-checking platform focused on political claims, offering detailed explanations and evidence-based verdicts on current issues.**
- **FactCheck.org:** <https://www.factcheck.org>
- **A non-partisan website dedicated to checking the factual accuracy of political news and statements.**
- **Google Reverse Image Search:** <https://images.google.com/>
- **A tool that allows users to search by image, helping verify the origins and authenticity of visual content.**
- **TinEye:** <https://tineye.com>
- **Another reverse image search tool that assists in identifying image sources and detecting alterations or misappropriations.**
- **NewsGuard:** <https://www.newsguardtech.com>
- **A browser extension that provides credibility ratings for news websites based on journalistic standards and transparency.**
- **Hoaxy:** <http://hoaxy.iuni.iu.edu/>
- **A tool that visually maps the spread of information (and misinformation) on Twitter, highlighting interactions between users and bots.**
- **CrowdTangle:** <https://www.crowdtangle.com>
- **A platform used to track and analyze the spread of content on social media platforms like Facebook, Instagram, and Reddit.**



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