

Hazard Literacy Center

Hazard Literacy Education Program

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Disaster Information on Social Media: How Far Do We Trust It, How Far Do We Pass It On?



1. Program Overview

This disaster-education program is designed so that learners do not reduce the reliability of information circulating during a disaster to a matter of individual discernment, but instead understand it as a compound disaster in which information access, the media environment, and structures of social trust are intertwined-in other words, as an information disaster (an infodemic). It deals in particular with issues that do not resolve into a single correct answer, such as whether unverified information should be shared quickly in the early stages of a disaster or held back until it can be confirmed, and it has learners personally experience both the affirmative and the opposing positions.

After verifying real disaster information through the four steps of SIFT, learners hold an affirmative-versus-negative debate on a single proposition and then switch sides and debate again. Having experienced both positions, each group produces not a victory for one side but a consensus proposal that both sides can accept. Through this process, learners come to understand how harm caused by the information gap deepens, and they critically examine the fair distribution of information and responsible communication from the perspective of disaster justice.

Grade Level	Middle and high school students	Instructional Methods	Lecture, case analysis, fact-checking practice, role-reversal coexistence debate, group consensus
Learning Environment	Regular classroom (a space that allows group work)	Duration	150 minutes total (50 min × 3 sessions)
Required Materials	Activity sheets; writing tools; at least one smart device per group; clips from the docudrama The Social Dilemma (2020, Netflix); news and fact-check materials on disinformation from the March 2025 North Gyeongsang (Uiseong-origin) wildfire; verification cases of AI-generated images from the January 2025 Los Angeles wildfire (Snopes, Full Fact, etc.); screens from the SNU FactCheck archive (factcheck.snu.ac.kr); the four-step information-verification (SIFT) guide; debate opening-argument and rebuttal forms; slides. Optional: a clip from the film Don't Look Up (2021).		

2. Learning Objectives (Hazards Literacy Framework)

① Understand and explain the causes and progression by which disinformation spreads during a disaster.
② Compare domestic and overseas cases of disaster information to analyze how, even in the same disaster, information-related harm appears differently according to information access, the media environment, and social conditions.
③ Debate a single proposition from both the affirmative and the negative side (opening argument, rebuttal, closing statement), then switch positions and debate again.
④ After experiencing both positions, derive a group consensus proposal-covering the fair distribution of information and responsible communication-from the perspective of disaster justice.

Learning Objectives	Knowledge & Understanding		Reasoning & Skills					Values & Attitudes			Psychology & Emotion			Behavioral & Practical Enagement		
	A1	A2	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3	E1	E2	E3
Objective ①	O	O		O												
Objective ②		O		O	O				O							
Objective ③						O	O	O				O				
Objective ④							O		O	O				O		O

3. Key Concpets

· The production-distribution-consumption structure of disaster information
· The difference between misinformation and deliberately manipulated disinformation
· How an information disaster (infodemic) arises and its social impact
· The digital divide and information-vulnerable groups
· Fact-checking criteria and the four steps of SIFT (Stop, Investigate, Find, Trace)
· The features of AI-generated disaster images and videos and the cues for detecting them (watermarks, visual errors, etc.)
· The many-sidedness of the issue: the tension between speed and accuracy, and between freedom of expression and responsibility

4. Program Sequence

Learning Activities	
Introduction	·Present news and social-media cases of disinformation during disasters to spark interest. ·Pose the answer-less question: "How far should we trust disaster information, and how far should we pass it on?" ·Explain that both affirmative and negative positions can hold on the same issue.
Activity1	·Understand the causes of the spread of disinformation (fear, uncertainty, algorithms, platform structure) and how it unfolds. ·Practise fact-checking by applying the four steps of SIFT to real disaster social-media information (the 2025 North Gyeongsang and LA wildfire cases): one teacher demonstration plus one group exercise. Detection cues for AI-generated images are covered together. ·Through an information-vulnerable persona activity, confirm that the same information reaches different people differently. ·Starting from the activity, settle on a debate proposition (one that is evenly contested) in a single sentence. ·Each learner sets an initial position (with advance notice that positions will be swapped in Session 2).
Activity2	·Confirm the proposition, analyse the reading materials, and organise the team's position and evidence (Step 1). ·Hold the first debate in the order opening argument → rebuttal → closing statement, recording the opposing team's claims and evidence (Step 2). ·Have each group organise the claims and evidence exchanged in the first debate, with notice that positions will be swapped next session.
Activity2	·After checking the opponents' claims with a rebuttal checklist, switch to the position opposite to the first (Step 3). ·Conduct the second debate from the switched position (Step 4).
Wrap-up	·Drawing on the experience of both positions, derive a group consensus proposal-"Three Principles for Sharing Disaster Information"-that includes measures to protect information-vulnerable groups (Step 5). ·Present and share the group proposals, and reflect on the meaning of protecting information-vulnerable groups from the perspective of disaster justice.

5. Theoretical Background and Activity Design for Disaster Education

Disasters in contemporary society are not confined to natural phenomena or technological accidents. Disinformation that spreads rapidly through social media and messengers during a disaster itself functions as another disaster-an information disaster, or infodemic. Pointing out that the flood of information and the spread of disinformation made the public-health response more difficult during the COVID-19 pandemic, the World Health Organization officially adopted the concept of the "infodemic" (World Health Organization et al., 2020). Wardle and Derakhshan (2017) distinguished information disorder into misinformation, disinformation, and malinformation, offering a conceptual framework for understanding information disasters.

Such information disasters are clearly evident in recent cases. During the massive wildfire that began in Uiseong in March 2025 and swept across northern North Gyeongsang, unfounded claims such as arson-conspiracy theories spread through online communities; in the Los Angeles wildfire of January that same year, AI-generated images and videos of the Hollywood Sign in flames were viewed hundreds of thousands to over a million times within a single day on social media, amplifying confusion. The two cases show that even in the same type of disaster, the pattern of disinformation differs according to the media environment and platform structure, and they serve as material for this program's comparative analysis of domestic and overseas cases (Goal ②).

Even in the same disaster, the quality of the information people receive varies with their level of media literacy, the platform they use, their social networks, and their digital access, and this difference translates into differences in disaster harm. That most of the fatalities in the 2025 North Gyeongsang wildfire were older adults, and that gaps in information delivery led directly to harm in a situation where evacuation sites were changing in real time as the wind shifted, illustrates this well. Older adults, multicultural families, and digitally vulnerable groups in particular have lower access to official information and are therefore more vulnerable to harm from disinformation. Such gaps can be interpreted through the perspective of disaster justice, which applies to the disaster-information context a framework of social justice encompassing distributive, procedural, and interactional justice (Lukasiewicz & Baldwin, 2017). For the information-verification activity, the program adopts the four steps of SIFT (Stop, Investigate the source, Find better coverage, Trace to the original) proposed by Caulfield (2019). SIFT is suited to secondary learners in that it trains a short, repeatable behavioural routine rather than the memorisation of checklist items.

Yet the question of how to handle disaster information does not resolve into a single answer, because speed and accuracy, and freedom of expression and responsibility, often collide. This program addresses such issues through the "role-reversal coexistence debate" model of the Seoul Metropolitan Office of Education (2023). The program comprises three stages: ① Session 1 (analysis of The Social Dilemma clips and the 2025 North Gyeongsang and LA wildfire disinformation cases, plus SIFT practice, leading to cognition and the settling of the issue); ② Session 2 (grasping the issue and first analysis of materials-first debate); and ③ Session 3 (second analysis of materials and position swap-second debate-group consensus proposal). The debates in Sessions 2 and 3 proceed through five steps: grasping the issue and first analysis of materials-first debate (affirmative/negative)-second analysis of materials and position swap-second debate (with switched positions)-group consensus proposal. Having experienced both affirmative and negative sides, learners create not a victory for one side but a consensus proposal for coexistence, into which they build the protection of information-vulnerable groups.

6. Instructional Considerations

- Make clear from the outset that the purpose of the debate is not to win but to understand both positions and find a consensus for coexistence.
- Assign the affirmative/negative sides independently of students' actual beliefs, and explain that the key is to experience "the reasonableness of the other side" through the position swap.
- When dealing with a real event that caused many casualties and much property damage, such as the 2025 North Gyeongsang wildfire, exclude sensational images and videos and use text-centred fact-check materials, agreeing in advance to use language that respects the victims and the displaced. Considering students from affected areas or with related experiences, explain that anyone who feels uncomfortable may substitute an overseas case (e.g., the LA wildfire).

- SNU FactCheck (factcheck.snu.ac.kr) has been on indefinite pause since August 2024, so no new verifications are produced; it provides existing verification statements as a read-only archive. Use it as a resource for reviewing accumulated verification cases rather than as a real-time verification tool, and supplement recent cases with the fact-check sections of news outlets and international fact-checking organisations (Snopes, Full Fact, AFP Fact Check, etc.).
- Avoid reducing the cause of the spread of disinformation to "individual ignorance" or "the problem of a particular generation," and guide students to understand that algorithms, the information environment, and structures of social trust operate together.
- Take care that debate examples do not include sensational expressions or content that satirises or mocks particular individuals or groups, and give advance notice that such expressions are to be handled only within the class and then discarded.
- Ensure that fact-checking does not drift into one-sided criticism of a particular outlet or camp, and emphasise general criteria such as source confirmation, evidence verification, and cross-checking.
- Because the personal-smartphone activity (the "algorithm mirror") exposes one's own account screen, advise students to share only the range they are willing to show, and prepare shared group devices for students without a phone.
- Use only the minimum length of video works (e.g., The Social Dilemma) necessary for instructional purposes, and comply with the relevant laws and the school's copyright-use guidelines.
- Require that the consensus proposal include measures to protect information-vulnerable groups, so that the disaster-justice perspective does not remain an abstract slogan

7. References

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Session 1: Disaster Information on Social Media — Can We Trust It?



Topic	The reliability of disaster information, fact-checking, and identifying the key issue
What will we learn?	① Understand the causes and spread of misinformation. ② Verify disaster information using the four SIFT steps, and decide the debate issue and my initial position.

1 Think About It

- Watch videos and news of 'fake information' that spread on social media during a disaster. Write about the confusion people faced and how those scenes made you feel.

2 Disaster Information — Why Is It a Problem?

- Why does misinformation spread so fast during a disaster? Consider the factors at play — fear, uncertainty, algorithms, and platform design.

3 The Algorithm Mirror — My Feed vs. My Friend's Feed

- After watching the documentary The Social Dilemma (2020), have each group member (or use a shared device) search 'disaster' and compare the top three recommendations. Write why the recommendations differ even for the same word.

4 Verifying with the Four SIFT Steps

- Choose one piece of disaster social-media content about the 2025 Gyeongbuk wildfires or the LA wildfires and apply the four SIFT steps. If it is an image or video, also check for signs of AI generation (watermarks, garbled text, unnatural details).

Step	What to check
Stop	
Investigate (check the source)	
Find (better coverage)	
Trace (to the original)	

5 A Day in Three Lives — Stepping into the Shoes of the Information-Vulnerable

- Three people receive the same breaking disaster alert (like the 2025 Gyeongbuk wildfires, where a shift in the wind changed the evacuation site in real time). Become one of them and write in the first person from that person's situation.

A teenager comfortable with smartphones	**A migrant with limited Korean**	**An older adult who finds text messages difficult**
Quick to access information, but finds it hard to tell what is real	Struggles to immediately understand the Korean in alerts and notices	Easily misses smartphone alerts and evacuation texts (in this wildfire, most of the actual victims were older adults)

1) What information did your person need most, and did they actually receive it?

2) As a group, decide which of the three was in the most danger, and write why.

6 Framing the Issue + My Initial Position

- Write a debatable proposition in one sentence, with strong cases on both sides. (e.g., "Right after a disaster, danger information should be shared quickly, even before it is officially confirmed.") Then decide your position for now (you will revisit it in Sessions 2 and 3).

Our class debate proposition	**My initial position (for / against) + reason**

Session 2: Framing the Issue and Facing Off — First Debate

Topic	Identifying the issue and analyzing first-round sources → First debate (for/against)
What will we learn?	① Understand the debate proposition and organize our team's position using the reading materials as evidence. ② Debate with evidence in the order of opening argument, rebuttal, and closing statement.

1 Identifying the Issue & Analyzing First-Round Sources

- Write the proposition from Session 1, summarize the reading materials (e.g., fact-check cases of misinformation from the 2025 Gyeongbuk and LA wildfires), and then organize your team's position and evidence.

Category	Content
Debate proposition	
Our team's position	(For / Against)
Claim and evidence (include source citations)	

2 First Debate — Arguing For and Against

- Proceed in the order opening argument → rebuttal → closing statement, and record the other team's claims and evidence while preparing your rebuttals.

Category	Other team's main claim	Their evidence	Our rebuttal
1			
2			
3			

Session 3: Standing in the Other's Place — Second Debate and Consensus

Topic	Switching sides → Second debate → Group consensus proposal
What will we learn?	① Switch to the opposite of your first position and debate again. ② After experiencing both sides, reach a group consensus that includes protecting information-vulnerable groups.

3 Analyzing Second-Round Sources & Switching Sides

- Use the checklist below to examine the other side's claims, then switch to the opposite of your first position.

Rebuttal checklist	Check (✓)
Did the other team use terms correctly?	
Is the other team's evidence sufficient and its sources clear?	
Are there any contradictions or exaggerations in the other team's claims?	
Does the other team's argument take information-vulnerable groups into account?	

Our team's new position: (For / Against)

4 Second Debate — Arguing from the Switched Position

- From your new position, give the opening argument, rebuttal, and closing statement again. Having experienced both sides, write what has changed from your first thoughts.

Category	(New position) Our team's main claim	Points to rebut the other team
1		
2		

5 Group Consensus — Three Principles for Sharing Disaster Information

- This is not about winning or losing. Agree on and write 'three principles for sharing disaster information' that both the for and against sides can accept.

Category	Our group's agreed principles
Principle 1 (criteria for when to 'stop' information)	
Principle 2 (criteria for when to 'pass on' information)	
Principle 3 (how to 'protect' information-vulnerable groups)	

6 Wrapping Up from a Disaster-Justice Perspective

Disaster justice: the view that because disaster harm is not the same for everyone and varies with social and economic conditions, more vulnerable people should be protected first.

Who does our consensus proposal most aim to protect, and why?