How to spot written disinformation

1. Introduction

False and misleading information comes in many different forms. This activity will explore how the written word has been used to mislead.

False information is common on social media. We will look at techniques that authors of disinformation use when they share their content on social media.

Learning outcomes

By the end of this activity, you will be able to:

- identify common traits of false and misleading written content on social media
- recognise common traits of credible and reliable social media posts
- recognise how social media platforms contribute to the spread of disinformation.

Allow approximately **15 minutes** to complete it.

2. Disinformation on social media

Authors of disinformation often use social media to spread their content.

When using social media, it is important to look out for false and misleading information.

Disinformation is often carefully designed to encourage readers to like or share it. Understanding the techniques used can help you to recognise disinformation.

Below we have listed key things to look out for when reading posts, blogs, articles or comments online.

Information that is taken out of context

A lot of content shared on social media platforms is not original. Posts are often short, providing edited information, not the whole picture. Important context gets lost along the way.

For example, posts might share stories where renewable energy has failed such as wind turbines that don't spin or solar panels covered in snow. By failing to provide explanation or context for these failures, these stories imply that renewable energy is

unreliable. However, the issue might be temporary, or part of a planned maintenance cycle. Without the context it is impossible to make an accurate judgement.

Be critical of information that seems out of context; it might be designed to mislead you.

Incomplete information

Sometimes people spread misinformation by sharing small details that are true, but do not present the whole story. Because part of the information is accurate, it can seem believable at first. By leaving out important details, the overall message becomes misleading and gives a false impression.

A common example of this is the statement that the manufacture of an electric vehicle (EV) produces more emissions than that of a petrol-engine car. The statement is true. The manufacture of electric cars does generate higher emissions. This might lead you to believe that electric vehicles are more polluting than traditional petrol cars.

However, this isn't the case. Although producing EVs creates more emissions at the manufacturing stage, they generate lower emissions during their lifetime than petrol-engine cars in almost all situations. Emissions do vary between different types of EVs and the type of energy used to charge the battery but "... electric cars are actually much, much better in terms of impact on the climate in comparison to internal combustion vehicles. And in time, that comparative advantage of electric cars is going to grow" (Moseman and Paltsev, 2022).

Beware information that misleads by omitting the detail. Don't rush to make judgement. Make sure you get the full story first.

Information that is out of date

Climate disinformation often includes outdated opinions or events to deliberately discredit the current accepted climate science.

Don't be misled by out-of-date information. Check when any reported opinions or facts were originally published. This will help you identify outdated content.

Emotive or sensational posts

Disinformation often plays on your emotion. It might make you feel scared or angry.

Don't be manipulated. If you read a post that triggers your emotions it could be a warning sign that the post is not legitimate.

Conspiracy theories

Some disinformation is posted by people who believe conspiracy theories. During periods of extreme weather, for example, conspiracy theories claiming the weather is being deliberately engineered or manipulated are disturbingly common.

Don't be taken in by a conspiracy theory. If information appears incredible, make sure you check it against a source you trust.

Fake experts

When information is endorsed by an expert it can be very compelling. However, it is important to check the credibility of that expert. Authors of disinformation often use fake experts to mislead the reader into believing their false claims. An investigation by the Press Gazette (Waugh, 2026) recently uncovered 1,000 articles in the British press that were attributed to fake, non-existent or AI-enhanced experts.

Beware of fake experts. Always check the credentials of anyone presented as an expert. If they are genuine, you should be easily able to find information about them online.

Attacks on credible experts

Another common tactic is to attempt to discredit genuine experts by posting critical or even hateful comments on their posts.

Hateful comments are always unacceptable. They place a personal toll on the expert, can limit discourse on important topics like climate change, and can discredit genuine science.

Don't be swayed by other people's comments. Consider who posted them, and what their agenda might be. Verify the facts yourself and make up your own mind.

3. Examples of credible social media posts

So far, we have considered tactics that are commonly used by authors of disinformation.

Here we have listed examples of credible and trustworthy posts.

Read each post carefully. Can you identify the qualities that make these posts trustworthy?

- Human activity is the main cause of current climate change. Burning fossil fuels has raised CO_2 levels by over 50% since the Industrial Revolution, leading to global warming (NASA, IPCC, UK Government) .
- Switching to EVs cuts exhaust emissions to zero, and as the grid becomes greener, overall emissions fall too. Manufacturing impacts matter, but long-term savings are significant (Climate Change Committee).
- Much heavier snowfall in regions where winters were historically mild is a sign of climate change. Some climate change deniers falsely claim that increased snow must indicate a cooling world. But climate change makes extreme and erratic weather more likely—and in some cases, more severe (Union of Concerned Scientists, 2022).

You may wish to take some notes before reading the feedback below.

Feedback

- **Human activity is the main cause of current climate change. Burning fossil fuels has raised CO_2 levels by over 50% since the Industrial Revolution, leading to global warming (NASA, IPCC, UK Government).** This example provides clear facts from trusted sources. Links to sources are provided so that you can follow up.
- **Switching to EVs cuts exhaust emissions to zero, and as the grid becomes greener, overall emissions fall too. Manufacturing impacts matter, but long-term savings are significant. (Climate Change Committee).** This post acknowledges the full story, unlike the disinformation posts we discussed earlier. The source is also provided, enabling you to check the facts and credibility of the post.
- **Much heavier snowfall in regions where winters were historically mild is a sign of climate change. Some climate change deniers falsely claim that increased snow must indicate a cooling world. But climate change makes extreme and erratic weather more likely—and in some cases, more severe.** This example, from the Union of Concerned Scientists is formatted as a "truth sandwich". Truth sandwiches typically contain three statements. In this example the first and last sentences both clearly state the fact that climate change causes extreme weather. The middle statement references the disinformation, whilst also making it clear that this information is false. The *order* is important. By repeating the truth it reinforces the facts. The falsehood is acknowledged but the post leads and ends with the truth. A truth sandwich can be an effective way of challenging disinformation.

4. How social media can increase the spread of disinformation

As we have seen, people who wish to spread disinformation often use social media platforms to share their misleading content.

Social media platforms contribute to the spread of disinformation in various ways:

- **Anyone can post content on virtually any topic.** This allows the spread of biased information and harmful conspiracy theories.
- **Content is not checked for accuracy or truth.** This enables the spread of false and misleading content.
- **Platforms encourage users to share content.** This means that disinformation can sometimes 'go viral'.
- **Most platforms use algorithms which select the content that appears in social media feeds.** Posts are chosen based on the content that the user has previously engaged with. This has a two-fold impact. Users who have engaged with disinformation in the past, are likely therefore to see more

of it. Their feeds are also unlikely to include content which challenges this disinformation.

Take things further

Take the Misinformation susceptibility test, designed by the University of Cambridge, to check how likely you are to believe false news headlines. (You may find it helpful to open the link in a new tab or window).

5. Summary and key points

False and misleading information can be about any topic; whatever the subject, disinformation is always harmful.

Although disinformation appears in many forms, there are common traits to look out for, which can help you identify disinformation.

- Information is taken out of context.
- Posts include selective details, not the full picture.
- Language is emotional or sensational.
- Conspiracy theories are shared.
- Fake experts are used.

In contrast, credible information will usually:

- provide clear facts and verifiable data
- credit trusted sources and genuine experts
- use calm and considered language.

Next Steps

If you want to learn more about other types of false information and how to stop its spread, have a look at the other activities in the 'Spotting and stopping false information' pathway.

6. References

Denniss, E. and Lindberg, R. (2025) 'Social media and the spread of misinformation: infectious and a threat to public health', Health Promotion International, 40(2). Available at: https://doi.org/10.1093/heapro/daaf023.

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Union of Concerned Scientists (2022) How to stop disinformation. Available at: https://www.ucs.org/resources/how-stop-disinformation (Accessed: 05 March 2026).

Waugh, R. (2026) ‘PR bodies launch campaign against fake experts after Press Gazette investigation’, Press Gazette, 30 January. Available at: https://pressgazette.co.uk/news/pr-bodies-launch-campaign-against-fake-experts-after-press-gazette-investigation/ (Accessed: 05 March 2026).