

**Navigating
Mis and
Disinformation**

Teachers Resource



Helping to develop the skills needed
to recognise when information online
may not be trustworthy

Lesson title: **Navigating mis and disinformation**

Lesson Overview

Lesson Description:

This lesson introduces students to the concepts of miscommunication and disinformation and helps them develop the skills needed to recognise when information online may not be trustworthy. Through discussion, real-world scenarios and guided activities, students explore common warning signs of false or misleading information, including exaggerated claims, unreliable sources and emotionally persuasive content. They learn why misleading information is created and shared, how algorithms and platforms can influence what they see online, and when instincts alone are not enough to judge accuracy. The lesson builds students' confidence in knowing when fact-checking is needed and familiarises them with practical strategies and tools for checking information before believing or sharing it.

Lesson Intentions:

By the end of this lesson, students will be able to:

- Understand that not all information online is true or reliable
- Recognise common signs that information may be misleading, false or designed to trick people
- Explain when and why fact-checking is important
- Use simple strategies to assess information, such as checking sources and comparing information across different websites
- Identify tools and trusted sources that can help them fact-check information
- Feel more confident questioning online content before believing or sharing it.

Lesson Outcomes – KS2

By the end of this lesson, students will be able to:

- Recognise that not everything they see or hear online is true
- Identify simple warning signs that information might be fake or misleading (e.g. “too good to be true”, strange sources, big claims)
- Explain why they should stop and think before believing or sharing information online
- Ask basic questions about information they see online (e.g. Who made this? Can I trust them?)
- Demonstrate simple fact-checking strategies, such as checking another trusted website or asking a trusted adult
- Create a visual or verbal guide showing safe steps to follow when checking online information

Lesson Outcomes – KS3

By the end of this lesson, students will be able to:

- Distinguish between reliable and unreliable online information
- Identify and explain a range of indicators of misinformation and disinformation
- Describe reasons why false or misleading information is created and spread, including attention, influence and financial gain
- Evaluate the reliability of sources by considering expertise, evidence and intent
- Apply fact-checking strategies using multiple sources and recognised verification tools
- Justify conclusions about whether information is trustworthy using evidence and clear reasoning
- Reflect on their own online behaviour and the impact of sharing unverified information
- Demonstrate simple fact-checking strategies, such as checking another trusted website or asking a trusted adult
- Create a visual or verbal guide showing safe steps to follow when checking online information

Curriculum Links:

Key Stage 2 (Primary)

Curriculum Area	NI Curriculum Requirement	How the Lesson Meets This
Using ICT – Managing Information	Pupils should be enabled to access, select, interpret and evaluate information from a range of sources	Students assess online scenarios, identify warning signs of fake information and practise deciding when information is unreliable
Using ICT – Research & Inquiry	Pupils should use safe and reliable sources to find information	Through guided discussion, pupils learn to cross-check information and recognise trusted sources
Personal Development & Mutual Understanding (PD&MU)	Develop pupils' ability to make informed and responsible decisions	Students learn to pause before believing or sharing online information and understand the consequences of misinformation
Thinking Skills & Personal Capabilities – Managing Information	Pupils should ask questions, identify relevant information and recognise when information is unclear or unreliable	Students question claims, identify missing or suspicious details and decide when fact-checking is needed
Thinking Skills – Being Creative / Working with Others	Pupils should communicate ideas clearly and work collaboratively	Creative visual task (road and road signs) allows pupils to represent learning and discuss safe online behaviours

Key Stage 3 (Post-Primary)

Curriculum Area	NI Curriculum Requirement	How the Lesson Meets This
Using ICT – Managing Information	Pupils should evaluate, interpret and challenge information from digital sources	Students analyse contradictory information, assess credibility of sources and apply structured fact-checking strategies
Learning for Life and Work – Citizenship	Pupils should explore how information influences opinions, behaviour and society	Discussion of why misinformation is created (money, influence, trolling) links digital literacy to real-world impact
Learning for Life and Work – Personal Development	Develop critical thinking and responsible decision-making	Students reflect on their own online behaviour and the risks of sharing unverified information
Thinking Skills & Personal Capabilities – Managing Information	Pupils should distinguish fact from opinion, bias and misinformation	Students justify whether content is real or fake using evidence, source reliability and reasoning
Communication	Pupils should express ideas clearly and justify viewpoints	Group discussions and summaries require students to explain decisions and reasoning

Cross-Curricular Skills (KS2 & KS3)

Curriculum Area	NI Curriculum Requirement
Communication	Class discussions, group work and summaries of learning
Using ICT	Understanding how search engines, AI summaries and video platforms influence information
Managing Information	Questioning, checking sources, comparing information and fact-checking
Critical Thinking	Evaluating plausibility, intent and reliability of online content

Lesson objective:

For students to recognise when fact-checking is needed and identify the tools to do this.

Suitable for: KS2, KS3

Timing: 60 minutes (with option to divide in two 30 minute tasks)

Starter:

(5-10 minutes): As a class, create a mind map around the word 'fake'. Get students to share suggestions on how they can tell something online is fake.

For younger pupils, or for classes which need guidance, share the following scenarios. Ask pupils which parts of the scenarios suggest that the information shared might be fake.

Scenario 1:

A famous streamer is giving away the latest iPhone for £1 to 100 of their followers! You see video clips from news shows and other channels where the streamer announces this. But on their own channel, they haven't posted anything about it.

Parts which suggest it's fake:

- Giving away an expensive item for very cheap
- Video clips are being shown everywhere except from them.

Scenario 2:

A post on social media claims that a cleaning product can also work as a “miracle cure” for pimples. It shows a person pouring a clear liquid into a clear bowl and then using a cloth to rub the liquid on a pimple, which disappears!

Parts which suggest it's fake:

- **Using a product for an unintended, potentially harmful purpose**
- **Claiming something is a miracle cure**
- **The liquid is clear and could be water; it's hard to tell**
- **The 'cure' works instantly, which is unlikely.**

Scenario 3:

A gamer in an online game says they know how to get 1000 free credits added to your account by defeating a really hard level. They say they've done it and share a link to a news story from a strange site that talks about it. They say they can help you get the credits too.

Parts which suggest it's fake:

- **An offer for something really interesting that you might not be able to do**
- **A source which you don't recognise or seems strange**
- **An offer to help you, which could lead to a scam**

If using these scenarios, allow for additional time for your starter.

Summarise:

Most people have instincts which tell us when something is strange and not trustworthy. Our instincts don't always work though, so we need to look out for signs. But sometimes, there are no signs, so we need to fact-check.

Activity 1. Assessing Information

(20 minutes)

Read each part of the following story as a class and use the guiding questions to lead a discussion on assessing and fact-checking information.

Part 1: Using a search engine

Jacob's Primary 5 class is learning about Space. He has to research the planet Mercury using resources from the internet to build his research.

One of the first things he does is open a search engine and type "facts about mercury." The AI Overview says "Mercury has the atomic number 80. At room temperature, it's a heavy, silvery liquid." Jacob finds it very interesting that a whole planet can become a liquid, so writes this down. He also writes other information that the AI Overview shares (but which he doesn't really understand; he just thinks it sounds smart).

Guiding questions

- **Jacob has written down the wrong information. How could he have found the right information?**

Guiding answers: *Avoiding relying on information in an AI Overview or search engine results and instead finding a trustworthy website that focuses on space like NASA; cross-referencing the information he found with other sources.*

- **What are some mistakes Jacob made with the information he gathered?**

Guiding answers: *He didn't understand all of what he was writing down, so he couldn't properly assess it; he accepted AI-provided information without a second thought.*

- **How could Jacob change his research technique to get more relevant information?**

Guiding answers: *Include 'planet' in his query – e.g. 'Mercury planet facts', start with understanding the different meaning of 'Mercury', which can include an element, planet or Roman God, possibly through using an encyclopaedia or dictionary.*

Part 2: Using video platforms

Jacob continues researching by looking for videos on YouTube. He finds videos from NASA and other space-related channels, which he finds helpful and interesting.

In his search, he comes across a video called 'Does Mercury REALLY exist?!' which stops him in his tracks! Of course it exists! But he watches the video, and the YouTuber makes some really good points like Hubble – the most powerful telescope in the world – has never taken a picture of the planet [and how little information there is about Mercury compared to other planets. Jacob then sees other videos which talk about Mercury being fake. He watches them and includes some of that information in his research because it seems really convincing.

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Guiding questions

- **Why might someone make a video that goes against what science tells us?**

Guiding answers: *The more outrageous a video is, the more views it's likely to get, which can make the YouTuber money; they like making people angry for fun [called a troll]; they have been misinformed themselves.*

- **What could be causing Jacob to see so many videos featuring the wrong information?**

Guiding answers: *When we watch a video, the platform thinks we like it [even if we don't], so it will recommend more of the same videos to us unless we tell it not to in the settings; it might be something that's being shared by a lot of people, making it more popular and more likely to be seen by Jacob.*

- **What could we do if we come across contradicting information (that is, information about a topic with two different versions of the 'truth')?**

Guiding answers: *Think carefully about what the most likely reality is [why would scientists want to lie about Mercury existing? What purpose would it serve?]; consider the sources – are they well-known, trusted sources? Which information is from a more trustworthy source?; ask a trusted adult [or multiple adults] for what they know/for their help.*

Part 3: Fact-checking information

Jacob now has all his research and is ready to create his project. His first paragraph says 'Mercury is a scientific conspiracy and doesn't actually exist. It has the atomic number 80 and can turn into a liquid that is really heavy and silver. It's supposed to be a planet but the Hubble telescope has never taken a picture of it, which means it's fake.' When he writes it all out, he's not sure any of it makes sense and feels frustrated.

Guiding questions

- **What are some strategies Jacob could use to untangle the information he collected?**

Guiding answers: *Talk with a trusted adult like his teacher to help him straighten things out; organise his sources by the information provided to see which type of information is coming from a well-known, trustworthy source [and then go with that information].*

- **If we're ever faced with new information, what are some ways we can check that it's true before believing it?**

Guiding answers: *Find 2 more trustworthy sources which confirm the information; go to websites like BBC Verify, Snopes or FullFact.org and search for the information [best for popular stories in the news or on social media].*

Activity 2. Fact-Checking

(25 minutes)

Choose from the following activities to help consolidate your students' learning. Activity 2a is designed for Key Stage 2 while Activity 2b is designed for Key Stage 3. However, you can choose the activity which best suits your students' abilities.

If time is limited, you can also assign these activities as a take home task or continue it in another lesson.

Activity 2a

Using what they learned from the discussions led earlier in the lesson, students create a visual representation of how to approach information they come across online.

Pen and Paper:

Students draw a road going into the distance. Or they can use the following template to get them started: **Click to download and print template.** The road represents their online 'journey' through different types of online information. Alongside the road, they should draw different types of road signs to illustrate things they (and others) should do when assessing information.

The road signs do not need to be accurate to what they might actually see when driving but should clearly illustrate the warning or instruction for keeping safe when assessing information online.

Encourage creativity and clarity as they show what they've learned from the lesson discussions.

Activity 2b

Provide students with the attached news and social media stories in groups or pairs. Together, they must read each story and decide whether they are fake or real. If they think the story is fake, they must identify which parts make them think this. Is there something about the way it's written? Is the image strange? Is it just a feeling?

Students should summarise their thoughts for why the image might be fake and brainstorm what they could do to fact-check the information.

If your students have devices with an internet connection, you can also get them to spend time fact-checking the stories.

Note: All of the provided stories are fake, but students should feel like at least one might be true before they start the activity. If possible, question their conclusion – whether they say the story is true or fake, ask them if they're sure and how they know they're right. You can reveal that they were all fake at the end of the lesson.

Plenary

(3 - 5 minutes)

Have students summarise their learning by listing 3-5 things that they think other people need to know/do when it comes to new information online.

Additional Creative Task Idea:

Adobe Express - Trustworthy Road

Using Adobe Express, students will create their own road with danger signs which relate to the dangers they have experienced online. They will then create 'Warning' signs, such as STOP or Too Good to be True, warning others of the dangers on this road.

Here is an example to get your students started.

Click here to take you to the Adobe Express Template.

To use this template:

1. Click on File and Duplicate.
2. Rename the template, for example your pupils initials and the date.
3. Click open
4. Ask your students to edit the text on the signs to create their own danger signs.
5. Place the warning signs beside the danger signs
6. Your students could also use AI to generate their own images.

REVIEW

Give students the opportunity to view each other's work. This may be done by viewing selected pieces of work or students may circulate the room.

Encourage students to discuss the dangers which they have designed on their road, and explain how they addressed them.

Additional Creative Task Idea:

Scratch 3.0 - Online Journey Game

Using Scratch 3.0, students will create and code their own game on the topic of mis and disinformation.

Here is an example game to get you started.

Using the arrow keys on your computer help 'Abby' to travel along the road. When she bumps into a road sign, she will inform you of what she thinks she should do.

Ask your students to make this project their own by clicking 'See inside', then going to 'File' and 'Save as a copy'. Students should then edit the signs to reflect dangers they experience online, then edit the code on the sprite 'Abbey' to reflect how she should address these dangers.

Don't forget to get your students to click on 'File and Save Now' as they are working on their project. You can then download a copy of the project game onto your computer.

Ask your students to look at the code and understand how the code works. You could then challenge your students to create their very own mis and disinformation game without using any template at all.

REVIEW

Give students the opportunity to view each other's work. This may be done by viewing selected pieces of work or students may circulate the room.

Taking other students' feedback into account, ask students to justify their choices and decisions, including any difficulties they encountered in the creation of their game. This may be completed in the form of a saved document.

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