

# Conspiracy Theories in the Classroom

## Guidance for teachers

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# 1. Introduction

This document aims to provide teachers with some general guidance on how schools might approach disinformation and conspiracy theories amongst pupils.

It contains summaries of some research in this area; discussion of general principles; 'reactive' guidance on how to handle situations when students raise conspiracy theories/ disinformation; proactive guidance on teaching about this topic; a deeper dive into the world of cognitive psychology and our biases, as well as a glossary of common conspiracy theories and links to free teaching materials. The guidance is written by two lecturers at the Institute of Education, UCL who are both former teachers. The guidance represents the views of the authors.

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## 2. Background

### 2.i Terminology

#### Fake news

An umbrella term for different kinds of false or heavily edited information. This often involves the different elements outlined below. The term ‘fake news’ is not always useful as it has been used by politicians and others to dismiss unfavourable but true information.

#### Malinformation

True information, but it has been deliberately shared to cause harm. For example, revenge porn. Can also be highly edited or selected information designed to give a misleading impression.

#### Disinformation

False information that is deliberately created — usually to harm an individual, social group, organisation or nation. Often presented as news or made to look ‘authentic’.

#### Misinformation

False information that is accidentally shared or created. There is no intention of harm, but may cause harm. These could be rumours that spread on social media groups, or well-meaning but false information. Misinformation is often spread by liking or retweeting false information believed to be true, so students (and teachers!) may unknowingly spread disinformation through simply ‘liking’ or sharing false headlines.

#### Conspiracy theory

A conspiracy theory may involve all of the above. The exact definition of a conspiracy theory is contested. Most accounts involve a belief that: *A group are secretly conspiring (or have conspired) in ways that cause harm but benefits the group.* A common feature of a conspiracy theory is that nothing happens by accident, nothing is as it seems and everything is connected.

Some definitions add that the explanation provided by the conspiracy theory must run counter to ‘official’ explanations. For example, the official US government rationale for the second Iraq war was that the Iraqi government was secretly conspiring to build weapons of mass destruction, but this was not termed a conspiracy theory as it was the official view of the state at the time.

It should be noted that conspiracies do happen in reality: from small scale online scams designed to steal money through to larger forms of secret planning such as the Volkswagen emission scandal. However, most conspiracies that teachers are likely to encounter in schools will be the more established theories which lack any credible evidence. A list of common conspiracies is provided in [Section 6](#).

It is worth noting how disinformation may lead people to research and subsequently believe in broader conspiracy theories. For example, the rise of covid disinformation saw an increase in people believing in the QAnon conspiracy theory (Lawrence & Davis 2020).<sup>1</sup>

## 2.ii Is there a need for school to respond?

There are indications that belief in conspiracy theories, and other types of disinformation, is growing. A *YouGov* poll in 2019 suggested that 60% of Britons held a belief in at least one conspiracy theory (*YouGov* 2019).<sup>2</sup>

In a recent survey of UK adults by the charity *Hope not Hate* (2020), 29% of those surveyed agreed (9% strongly) with the statement: “*Regardless of who is officially in charge of governments and other organisations, there is a single group of people who secretly control events and rule the world together*”. The number agreeing rose to 38% and 43% respectively among the 18-24 and 25-34 age groups.

In the same survey 25% agreed (7% strongly) with the statement “*Secret Satanic cults exist and include influential elites*”. Again, this claim found wider support among younger age groups with- 35% of 18-24s agreeing.

These higher belief levels among the younger age groups suggest that they may be more susceptible to conspiracy theories and forms of disinformation. This is perhaps to be expected as younger people tend not to draw on traditional forms of news media and access their news and information online (the dominant source of disinformation and conspiracy).

Recall the onset of Covid. Many of us will have seen false information that Covid-19 was linked to new 5G phone masts. The reason we saw these claims is likely to be because someone in our extended networks or groups shared or liked one of these false stories. In sharing this way people are actively spreading misinformation — often without realising it. In the UK alone, 159 5G masts were attacked (*Ofcom* 2020).<sup>3</sup>

Such sharing of stories is becoming increasingly important. Research has suggested that most people now click on news websites via links on social media. The same research also found that 59% of links shared on social media were never actually clicked on by the person doing the sharing! So, people are frequently retweeting/sharing news without reading it (*Gabielkov et al.* 2016).<sup>4</sup>

Disinformation is popular. Research on Twitter showed that false news stories are 70 percent more likely to be retweeted than true ones. Also, the speed at which false news stories’ ideas cascade is between 10-20 times faster than real news stories/facts (*Vosoughi et al.* 2018)<sup>5</sup>. *UNESCO* (2020)<sup>6</sup> has argued that we are currently in a ‘disinfodemic’ in which 30-40% of all social media posts are from unreliable sources, are misleading, or include manipulated content.

This spread of disinformation is not harmless. Beyond attacking phone masts, it can lead to behaviours such as climate change denial or refusal of vaccination or medical treatment. Many conspiracy theories (and other forms of disinformation) are racist in nature (either openly or more covertly), are often used to justify racist attitudes and behaviours and have often been associated with violence on the far right. The last few years have seen an increased mobilisation of conspiracy believers from the online world to the real world, ranging from relatively law-abiding anti-lockdown protests through to the violent storming of the Capitol and the attacks on phone masts.

Given the increased spread of disinformation and the higher levels of conspiracy belief amongst younger age groups, there would seem to be a reasonable case for schools to address issues relating to disinformation. Schools are in the ‘knowledge’ business and hopefully encourage students to develop true beliefs based on rational thought and evidence. The growth of belief in disinformation suggests that something may be missing.

This is not to blame schools. Schools cannot be a panacea for all the issues of society and the current National Curriculum is very crowded. It has an increased focus on the acquisition of knowledge which can leave less time to develop critical thinking or media literacy skills.

## 2.iii School age students and conspiracy belief/disinformation

Not much is known about conspiracy beliefs in the under 18s. In part, this is due to existing research questionnaires being unsuitable for this age group. However new survey tools have recently been devised and data is starting to emerge (Jolley et al. 2021).<sup>7</sup> The early indications are that conspiracy thinking starts to develop around the age of 14 and may even peak in late adolescents (in terms of the numbers of people believing in conspiracy theories). How deeply conspiracy beliefs are held at this age is not clear. The presentation of conspiracy beliefs by a student may be playing a role in a broader identity such as being as an alternative thinker, an outsider or even a disruptive student, rather than being a firmly held belief.

There is no single explanation for why people believe in conspiracies. Narrative explanations of events (e.g. Covid-19) – in terms of human agency – are popular and offer simple explanations for often complex or random events. In turbulent and anxious times (9/11 and Covid-19), there seems to be an increased tendency for some to search for meaning by explaining events in terms of hidden human agency.

For students, adolescence is also a time when young people seek broader answers, play with different identity roles and sometimes have anti-establishment feelings, in addition to it being a time of anxiety. All of these elements may be factors in drawing young people to conspiracy theories/disinformation.

Such beliefs can be harder to change if they are held for long enough to become ‘identity forming’ (see [page 18](#)). Luckily, this is not likely to be the case for many young people and teachers may be able to play an important role in keeping students open minded and suitably sceptical about conspiracies/disinformation.

Despite being the internet generation, it seems that young people are not particularly good at spotting disinformation or fake news. A recent research study asked American university students to evaluate two ‘news’ stories using the internet. One was from a satirical website, the other produced by a corporate lobbying group. Despite their efforts, two thirds did not discover that first ‘news’ story was satirical and 95% were not able to identify the lobbying group that produced the second piece of ‘news’. Students’ methods of evaluating were not reliable and relied on such things as the ‘look’ of a web page (Wineburg et al. 2020).<sup>8</sup>

## 2.iv Teachers handling conspiracy theory in classrooms

Again, there is little research from the teacher's perspective. In a project in Norway, Dyrendal & Jolley (2020)<sup>9</sup> found that teachers were not sure about what to do when students raised conspiracy theories. Some talked of 'panic' moments when these situations occurred, and teachers generally felt that they did not have the knowledge to deal with the situation or questions raised. Indeed, it is almost impossible for teachers to keep abreast of the changing platforms of social media and the evolution of conspiracy and disinformation. The worry about conspiracy belief can also lead to teachers avoiding topics. A survey of over 1000 teachers in the US found that conspiracy belief, and the potential of conspiracy belief, was a significant factor in why some of the teachers avoided teaching about 9/11 (Stoddard 2019).<sup>10</sup>

## 2.v General principle: Teacher 'direction' and treating conspiracies and disinformation as false.

Most teaching is directive in its nature, meaning there is a known answer and the teacher 'directs' pupils towards it. In contrast, some teaching is non-directive, for example discussing more open questions such as whether Scotland should have a second referendum, the aesthetic merits of a book, or the causes of some historical events. In issues where there is no agreed answer and room for rational debate, it would be *wrong* for teachers to direct pupils to the 'right' answer.

So, given this general principle, should teachers take a default 'directive' position of dismissing all conspiracy theories and 'dubious' information as false? Or should each one be dismissed (or not) on its merits?

Although it is true that people do conspire, and seemingly dubious pieces of information can turn out to be true, the sorts of conspiracies and disinformation that pupils might raise are likely to be the ones in general circulation, which are without credible evidence. So, the question, say, of whether the world is really run by blood drinking lizards (as propagated by David Icke) is not really open for meaningful rational debate. Because of this we would recommend taking a default position of treating conspiracies and dubious information as being false. That said, the manner and tone of this justification can be important.

Simply dismissing as false, without consideration, any claim that is not received wisdom or goes against an official explanation does not model good critical thinking. Also, dismissing a point in a cursory manner can lead to a sense of grievance, which can further strengthen the determination to prove a belief and even add to a conviction that there is a conspiracy.



“Dismissing a point in a cursory manner can lead to a sense of grievance”



At the same time, we do not recommend detailed discussions on conspiracies/disinformation when they are casually raised, but suggest the teacher adopts a sceptical tone, keeps the focus on critical thinking then moves on. Here are some examples:

**Pupil:** *The Covid vaccine causes infertility, it's all part of the great reset.*

**Teacher:** *It's good to question things, but there have been over three billion vaccinations and no evidence that Covid vaccinations cause infertility.*

**Pupil:** *Climate change is a hoax to give governments more power.*

**Teacher:** *All the evidence points towards climate change being real and being caused by humans.*

The difference here is in tone and language. Rather than simply telling a student “No, you are wrong” the teacher is making assertions based on best evidence, which presents the teacher as a critical thinker.

## 3. Reactive guidance

### 3.i When a student raises a conspiracy theory or another form of disinformation in a classroom

In general, it is best to **close down** the discussion of conspiracy theories/disinformation — but in an appropriate way. The conversation can be picked up with the student(s) after the class or at a later time, if needed. It can be worthwhile discussing conspiracy theories and disinformation in class, but these discussions would be better if pre-planned, either as a one-off lesson or coming as part of a planned sequence of lessons on media literacy or a related topic.

The reasons to close down the conversation (but possibly picking it up later) include:

- A student may have detailed ‘knowledge’ about a particular event e.g. 9/11, and it can be hard for a teacher to meaningfully counter ideas on the spot
- Repeating disinformation is spreading disinformation (technically it becomes misinformation if the intent is not harmful)
- There is usually lesson content to get through and it is not in the interest of the students to get side-tracked on a conspiracy discussion. (Closing down discussion on topics that are not really relevant happens a lot) ^  
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- The discussion with the pupil may not go well. Emotions may dominate. The student may feel backed into defending a position, which can then strengthen the belief v
- To entertain serious discussion of conspiracy/disinformation is to give debunked ideas or theories too much credit and actually serves to spread these ideas
- Many conspiracies are either openly or covertly racist. It is important that other students do not feel attacked. A classroom should be a safe space. Callan (2016)<sup>11</sup> makes a useful distinction between intellectual safety and dignity safety. A classroom should *not* be intellectually safe, as learning can be difficult, and ideas should be appropriately discussed and challenged. However, a student should not be made to feel victimised or attacked as a person, either directly or via an attack on an identity group. So racist ideas, such as anti-Semitic and anti-Islamic conspiracies should be closed down, and the student raising the conspiracy spoken to at a later point

It is worth noting that closing down discussion can have negative impacts:

- For the student/s it can be seen as a further proof of a conspiracy
- Ideally in a democracy we would allow a range of ideas to be discussed in class. So, it weakens student voice
- Students already suffer from a ‘credibility’ deficit in schools and dismissing a point in a cursory manner may lead to a sense of grievance, which can further strengthen the determination to prove a belief

Because of this last point, how the lesson is moved away from the focus on disinformation/conspiracy can be important. We would recommend not being overly dismissive and to avoid a dispute or disputational language. One approach would be to:

1. Acknowledge the idea
2. Give some sort of general counter/or caution (but not overly dismissive),
3. Park the topic

**Example 1: Pupil raises a conspiracy or piece of disinformation which the teacher is not familiar with:**

**Pupil:** *But the Queen is the centre of the Illuminati.*

**Teacher:** *Interesting perspective, is this something that you have read online?*

**Pupil:** *It's everywhere on Reddit.*

**Teacher:** *It's just that there is a lot of disinformation put out online, often by people with hidden agendas. So, I'm going to look into that and get back to you.*

Acknowledge, park it, move on.

Here the teacher is not dismissing the pupils' ideas out of hand but giving a warning about dangers and moving on. This also opens the way for the teacher to pick up the conversation later if they are worried about something.

**Example 2. A pupil raises a conspiracy or piece of disinformation you are familiar with:**

A similar approach to example 1 (warn and park) can work, but instead of the warning being generic (about the dangers of misinformation) it can be more specific.

**Pupil:** *9/11 was carried about by the CIA.*

**Teacher:** *It's good to question events, but there is no credible evidence for this, and we need to follow the evidence.*

**Pupil:** *But there is evidence. I've seen videos on YouTube.*

**Teacher:** *Yes, there are theories on YouTube. But this is not the same as credible evidence. If there was credible evidence then someone could bring a case to court or a newspaper run a big story, but twenty years later no-one has. It's good to acknowledge that there are conspiracy theories, but we're going to move on. Maybe I'll talk to you about this another time.*

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## 3.ii Having an informal chat with the pupil

Often a pupil may raise a conspiracy theory or piece of disinformation as a joke and the moment passes. However sometimes the issue raised may be a cause for concern, either because the conspiracy has racist elements, or a student may have very detailed knowledge and is being drawn too deeply into conspiracy thinking.

Chatting to the student informally, outside of the lesson, is a better approach than trying to establish the nature of the belief in front of a class. It may be that the form tutor is the best person to have this conversation.

In having an informal chat the aims should be to:

1. Find out more about their belief and gauge the level of engagement
2. Decide what response (if any) is needed

Below are some prompt questions to help gauge the level of belief and on the following page is a table outlining possible responses.

### 1. Find out more about their belief and gauge the level of engagement

Prompt questions:

*How did you come across the idea?*

*What do the posts/message online say?*

(It may be better not to directly ask them to articulate what they believe straight away, as this act of sharing the belief can help to consolidate the belief)

*What interests you about these ideas?*

*Do you post much?*

*Are there particular profiles or forums that you follow?*

*Have you been messaging people directly?*

*Have people been messaging you? What do they say?*

*What do you think is going to happen next/in the future?*

### 2. Decide what response (if any) is needed

The table below outlines different possible responses based on how you would characterise the conspiracy belief.

The general gist is to try and avoid the conspiracy theory becoming too established and identity forming. The strategies involve trying to reposition the student as a critical thinker, making them aware that many conspiracy theories are racist; warning them of the dangers of conspiracy thinking and being perceived as a conspiracy thinker. See also the section on how to speak to someone with a conspiracy belief ([page 11](#)).

Level of belief	Characterisation	Strategies/approaches
<b>Low</b>	<p>The occasional mention of a conspiracy theory by student. Different theories might be mentioned. Does not seem to be serious. Could be part of a broader identity as an alternative thinker, or as a disruptive student.</p> <p>Or</p> <p>Student raises a conspiracy theory to be funny/disruptive in class/ for attention.</p>	<p>A. Be supportive of critical thinking, of challenging ideas and beliefs, but encourage students to also apply this criticality to the conspiracy itself. What is the actual basis of this? What hard evidence is there? Might these ideas be spread for bad reasons?</p> <p>B. Although conspiracies may appear interesting at first, make students aware that many conspiracy theories are racist, either openly or less openly. Even though the student may not be racist, other believers may hold the conspiracy belief in a racist way. Note, this an argument by association, which are not always good (“<i>Hitler was a vegetarian, so vegetarians can’t be trusted etc.</i>”). However, it is important for the student to be aware of the role that conspiracies and disinformation play in developing or supporting racist ways of thinking, and the student needs to be aware that some people may seem them as racist for holding the belief.</p>
<b>Low to Medium</b>	<p>Student has mentioned a conspiracy theory once or twice. Has been doing research, but does not seem active e.g., posting or sharing ideas on line.</p>	<p>In addition to A &amp; B</p> <p>C. Student should be made aware that conspiracy thinking can lead deeper into more dangerous conspiracy theories.</p> <p>D. Acknowledge that conspiracies do occur. E.g. Volkswagen. Salisbury poisoning. But that the way these are discovered is through traditional methods of investigation, not by looking endlessly on forums.</p> <p>E. Warn the student not to back themselves too far into a corner. The more they repeat a conspiracy, the harder it is to back down and as a critical thinker it is important to keep an open mind.</p> <p>F. Speak with the form tutor or head of year. A conversation with parent(s)/guardian may also be appropriate.</p>
<b>Low to Medium</b>	<p>A student persistently raises a conspiracy. It is not a ‘dangerous’ conspiracy.</p>	<p>In addition to F. and some of the above</p> <p>G. Warn the student that they can no longer raise this in class as they are spreading disinformation.</p> <p>H. From anecdotal evidence the most persistently raised is the Illuminati conspiracy in which case you can develop on B above. The Illuminati conspiracy theory has been linked to anti-Semitic and racist ideas. Warn the student(s) that there will be consequences if they raise this again in class.</p>
<b>High / Worrying</b>	<p>A student shows a detailed level of involvement, is active on forums. For example, is posting, talks about followers. May have tried to recruit others.</p> <p>And/or the student shows interest in a conspiracy theory that is openly racist e.g. Protocols of the Elders of Zion; Great Replacement.</p>	<p>There may be child protection/Prevent concerns. Try to see how serious the beliefs are, how active their involvement is and whether there are individuals who are encouraging/leading them.</p> <p>In addition to some of the above...</p> <p>I. If you have any concerns, particularly if the student is making contact with others online, or is starting to view the world in terms of ‘us’ and ‘them’, then make some notes of the conversation and speak to the school Prevent lead.</p>

### 3.iii Conversational approaches — speaking to a conspiracy believer

There are some useful online guides about how to have conversations with conspiracy/disinformation believers. These are aimed at speaking with adults, but much of the general advice would hold with young people (who hopefully, have not held the beliefs for as long, and may be more open minded).

- ***The Conspiracy Theory Handbook***  
<https://www.climatechangecommunication.org/wp-content/uploads/2020/03/ConspiracyTheoryHandbook.pdf>
- Some Covid specific advice from ***Sense about Science***  
<https://senseaboutscience.org/wp-content/uploads/2021/06/Talking-about-Covid-Conspiracy.pdf>

The guidance recommends:

- Avoiding name calling, labelling and ridicule. This is likely to cause a defensive reaction
- Avoiding adversarial discussions that are win-lose. No one likes admitting they were wrong. And if someone does concede you have a good point, then don't labour this too much (i.e. rub it in). Or try to get further concessions
- Finding common ground e.g. casting both of you as critical thinkers can be helpful rather than setting out for an adversarial exchange
- Being supportive of critical thinking and of challenging ideas and beliefs, but encouraging believers to also apply this criticality to the conspiracy itself. What is the actual basis of this? What hard evidence is there? Might these ideas be spread for bad reasons?
- It is very hard to prove a conspiracy theory false. The goal of the conversation should not be to do this, but to encourage the person to be more open minded and consider the possibility that it may be false

In terms of trying to tackle conspiracy belief itself, there are different approaches. "Fact-based" challenges rely on specific knowledge of the conspiracy and why it is false. "Logic-based" approaches are more general and seek to show flaws or flawed methods in conspiracy thinking. Logic based arguments might include:

#### **Human nature**

Humans are not very good at keeping secrets at the best of times. Plus, there would be huge incentives to blow the cover on a big conspiracy. This suggests that the broader the conspiracy the less likely it is to be true. Any conspiracy involving thousands of people (e.g. all of the NHS workers conspiring to fake evidence of Covid patients) should be rejected as false, as it would require thousands of people to keep secrets for a long time. The Illuminati conspiracy for example, suggests there is a secret group running the world, yet there is no evidence of meetings, membership, rules, documents, photos etc. What about all the people that work for the Illuminati, this must involve thousands. And no-one has spoken out? This could be because the conspirators are very good at making people stay quiet or it could be because it is not true.

As a critical thinker, it is important for student to keep the possibility that it is not true in mind. The minute a person gives up on this, then they are no longer a critical thinker.

### **Wrong type of investigation**

Conspiracies do exist. People conspire. But the way these conspiracies are revealed is through traditional methods of investigation which provide credible evidence (The Salisbury poisonings, Volkswagen emissions scandal) or through whistle-blowers (Mark Felt (“Deep Throat”) & Watergate). Most conspiracy theorists are not engaged in genuine investigations, but are simply sharing ideas and conjectures on different online forums. This is not investigation. (Indeed, some suggest that one reason conspiracy theories are ‘sticky’ is that it casts the believer in the role of investigator, who invests time and effort searching the internet for clues to uncover the truth. In reality such people are simply sharing theories and ideas. This is not how conspiracies are revealed.)

### **Lack of credible evidence**

The main conspiracy theories have been openly discussed by millions of people for years and yet no credible evidence has emerged. No credible whistle blowers, no hidden recordings, no handbooks, no records of meetings. No court cases and nothing that traditional news media have thought was credible enough to pursue or pursue as a story. Again, this could be because the conspirators are incredibly clever and secretive (though not clever enough to keep the conspiracies off the internet), or it could be because there is no truth to the conspiracy theory.

It is very hard to prove a conspiracy theory false. This is a general principle about proving a negative. It is easier to prove a positive — there are weapons of mass destruction buried on the moon — as you only need one instance. But proving a negative — there are **no** WMD on the moon — is much harder, as there could be one, however hard to you look.

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This difficulty applies to most conspiracy theories. Many Americans believe the 2020 election was stolen from Donald Trump. They claim there was fraud and conspiracy.

It can be very hard to prove there was no fraud (proving a negative). However, the lack of evidence, given that people have searched for it, should count against the theory.

### **Closed loop thinking**

What evidence might emerge that would make the person give up their belief in the conspiracy? Can they imagine what might emerge that would count as evidence against it? If the person cannot articulate this, then they are in danger of holding their belief in such a way that it is impossible to ever show that it is false. It is unfalsifiable. Critical thinkers should base their ideas on evidence and be prepared to give up their belief if the evidence doesn't point that way. However, if nothing could ever hypothetically happen that would make them give up the belief, then they are no longer a critical thinker. They may even be engaged in closed loop thinking, where any event counts as evidence for their belief and even counter arguments (e.g. lack of court case or whistle-blowers) also count as evidence for their belief. Once again, a critical thinker must always hold the possibility that their ideas are revisable if evidence emerges.

# 4. Proactive guidance for teaching about disinformation/conspiracies

This section outlines different pedagogical approaches and at the end of this section there is a list of free resources aimed at building resilience and educating young people around disinformation and conspiracy theories.

## 4.i General teaching approaches

One of the first questions is where in the curriculum would one fit a series of lessons aimed at developing resilience to disinformation and conspiracy? There is no easy answer. In terms of subjects – English, Media studies, Citizenship, PSHE, RE and Science might be good fits, depending on the nature of the resources. In terms of age groups, year 9 might be suitable as some research suggests that this is the age at which belief in conspiracy theory may start to appear (Jolley et al. 2021).<sup>12</sup>

Research on teaching methods in this area suggests that a range of different approaches can be effective. These methods often overlap and include:

- **Developing media literacy knowledge.**  
For example, understanding different types of media and how they work, how they are regulated or not regulated. Understanding why people might create disinformation/conspiracies and how they are spread.
- **Developing media literacy skills.**  
For example, how to spot signs of disinformation or fake news. Looking for common signs, for example being aware of how images are often recycled with faked headlines to create disinformation.
- **Giving student activities. Evaluating/Creating.**  
Research has shown that getting students to do things such as critiquing a piece of disinformation, researching the credibility of a ‘news story’ or even creating fake headlines can be effective in making students more resistant to disinformation when they encounter it. Active involvement embeds the learning and moves it from the theoretical to practical.





- **Developing defensive strategies** (to stop the spread of disinformation).  
These often include mnemonics to help remember quick checks to run through before sharing/liking/or believing a purported piece of news/information. For example, here is a possible mnemonic:

**FACE the facts**

You should always **FACE** the facts before you like or share a story.



<b>F</b>	<b>A</b>	<b>C</b>	<b>E</b>
<b>F</b> eeeling.	<b>A</b> ccuracy.	<b>C</b> redibility.	<b>E</b> vidence.
<p>What is your emotional response to this story? Does this make you happy/angry? Often disinformation is designed to provoke an emotional response.</p>	<p>Question the accuracy. The story (good or bad) might fit your world view. You might want it to be true because it supports your view of the world. But stand back from the emotions and acknowledge the possibility that it might not be true.</p>	<p>What organisation is this coming from? Is this a trusted source?</p>	<p>Are other news outlets or information sources also running this story. Is there any hard evidence that can be checked elsewhere? Don't be fooled by a photo, often disinformation recycles old photos and creates a false story around it.</p>

- **Inoculation/prebunking.**  
This has not been widely used in schools as yet. A series of experiments on adults by McGuire in the 1960s (and subsequently repeated) showed that if the first time you hear about a piece of disinformation is in a context where someone is telling you why the disinformation is wrong, then when you do subsequently encounter the disinformation you are largely 'immune' to it.

## 4.ii Teaching Materials

This is a selection of materials available online to support teaching in the area of building resilience to disinformation and conspiracy thinking.

### **Bad News game**

An online game aimed at modelling the spread of mis/disinformation.

<https://www.getbadnews.com/#intro>

### **Sense about Science: Evidence Hunter Pack**

Aimed at 11-14s as an after school or form time activity, this pack aims to help pupils critically assess claims they hear online.

<https://askforevidence.org/articles/evidence-hunter-activity-pack>

### **Be internet citizens**

This curriculum is made up of several modules, covering key areas of digital citizenship, offering young people the opportunity to build their critical thinking skills while developing their knowledge of the online world.

<https://internetcitizens.withyoutube.com/#teaching-resources>

### **Association of Citizenship Teaching**

Aimed at secondary citizenship teachers, this site offers resources for teaching about media literacy. It takes Covid-19 and mis/disinformation as its focus.

<https://www.teachingcitizenship.org.uk/resource/media-literacy-teaching-resources>

### **Shout out UK**

A collection of infographics, videos and lesson resources on developing media literacy.

<https://www.shoutoutuk.org/media-literacy>

### **Digital Disruption**

A collection of videos which can be used as stimuli for discussion around credible sources of information. It takes a fake conspiracy theory as its central theme and uses that to demonstrate techniques of persuasion.

<http://blogs.boldcreative.co.uk/digitaldisruption/films/>

### **Checkology**

A full 70-minute lesson, incorporating videos and activities, aimed at learning to recognise conspiracies and what makes people vulnerable to conspiratorial thinking.

<https://get.checkology.org/lesson/conspiratorial-thinking/>

### **Newseum Ed**

An activity based upon fake news and click-bait headlines.

<https://newseumed.org/tools/lesson-plan/cooking-clickbait>

### **Conspiracy Lesson from Tower Hamlets**

A single lesson on conspiracy theories. Explores the structure of conspiracies and students make a new conspiracy.

<https://since911.com/education-programme/guidance-more-resources/conspiracy-theories>

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# 5. Background theory

## 5.i Deeper dive. Motivated reasoning and theories of cognitive bias

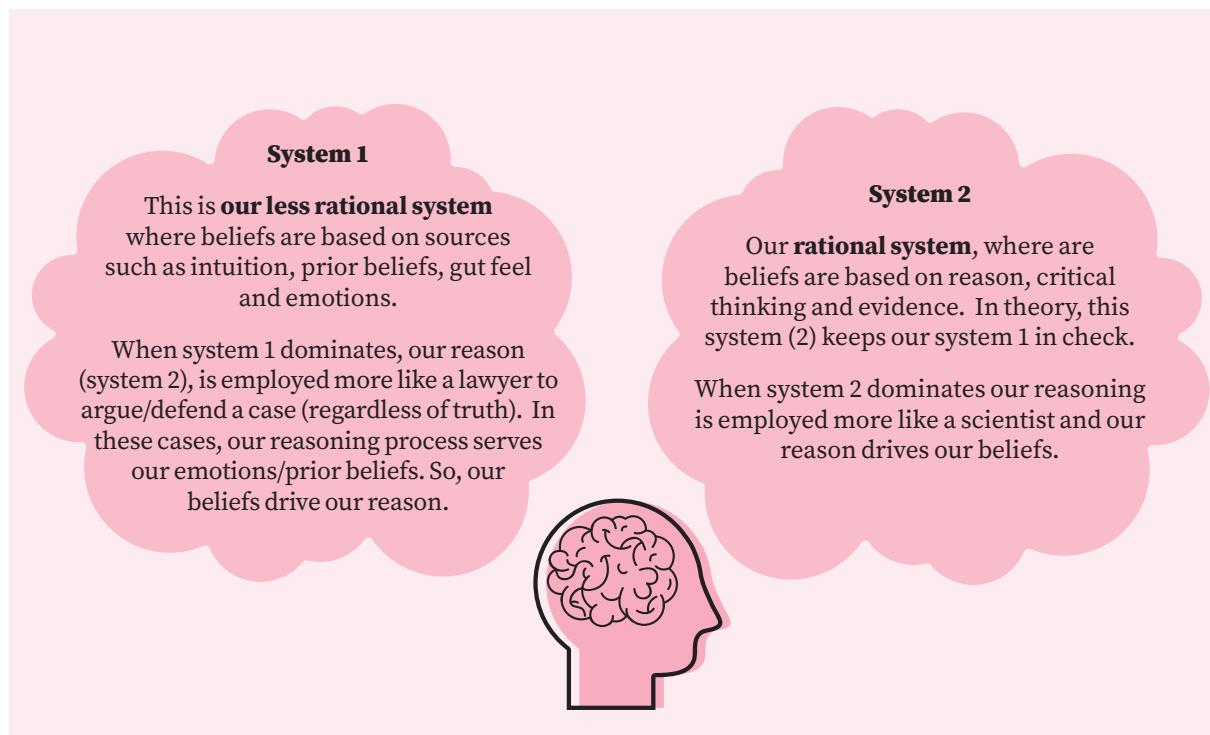
Most of us like to think of ourselves as rational thinkers — people who base their beliefs on facts and evidence. If new facts and evidence come to light then our beliefs will change accordingly, and this is because our reasoning and belief system aims to reach the truth. We are rational thinkers.

However, there is a broad range of empirical evidence to suggest that our reasoning processes do not always work this way. Often our reason is motivated by other factors — for example, to preserve an existing belief, to make ourselves feel better or to win an argument. In these instances, our reasoning is no longer solely motivated by the truth. We may not even be aware of the ways in which this can occur.

A growing area of research in this area of ‘motivated’ reasoning (sometimes called hot cognition) seeks to discover the different biases in our reasoning that can lead us astray from the truth-seeking, rational path.

For example, there is a flaw of reasoning that has been labelled the Ikea bias, which is the tendency to overestimate the aesthetic value of any item that we have made or put together. I am guilty of this!

Underlying many these of biases is a model of the human reasoning processes that suggests we are operating two distinct different types of belief making systems.



There is evidence to suggest that often system 1 dominates. That is, it is our prior beliefs and emotions the drive our reason rather than our reason driving our beliefs. System 1 thinking can bring about and exaggerate our cognitive biases.

Some of these biases include:

### **Confirmation bias**

This is the tendency to highlight information that supports your view and ignore evidence that challenges this. This can be made worse by receiving all your news from one source.

### **Disconfirmation bias**

The tendency to spend much longer discounting and criticising arguments on the 'other side' that go against your beliefs, rather than subjecting your own beliefs to scrutiny.

### **Backfire effect**

This is the term for the process whereby gaining more information that goes *against* your belief actually strengthens your belief, not weakens it.

### **Bolstering**

This is a phenomena whereby once we state a position we feel pressure to defend it, rather than rationally evaluate it. This can increase our biases.

### **Belief perseverance**

The tendency to hold on to a belief despite evidence showing it to be false. This is often associated with beliefs that are identity confirming or ego related.

To consider how these can play out in reality, consider Brexit. A few years prior to the referendum many/most people did not have strong views about whether the UK should stay or remain in the EU. However, after voting and (for some) publicly stating a position, the belief (one way or the other) became stronger and people felt pressured to defend their position (bolstering). After discussions became a little heated, for many people, reasoning was no longer acting as a neutral guide towards the truth, but serving to justify a prior position – which is how they voted (system 1 in action). People tended to focus on information that supported their side and ignored evidence that did not (confirmation bias). Most of the time spent thinking or arguing about the topic involved attacking the other side and arguing why they were wrong. In general people did not spend time re-evaluating their own choice (disconfirmation bias). The more some people engaged with the issue, the more it became an identity forming belief – which can further intensify cognitive biases (belief perseverance). Note that this description applies to both sides of the argument.

## 5.ii Identity forming beliefs

One important element that can impact upon reasoning is how identity-forming a belief is.

If someone presents overwhelming evidence that Shakespeare did not write *Hamlet*, then I am happy to adjust my belief about the authorship of the play. I am still the same person, but with a new belief. However, some beliefs are more entwined with our sense of identity. For example, a vegetarian, who believes that eating meat is wrong, will not easily give up their belief. Depending on how the belief is held (and perhaps how long it is held), it may be a defining belief. When this belief is questioned the person may feel attacked and become defensive. Defining beliefs are important to us and they are also hard to remove. Consider football teams. Supporting a team can be fluid up to a certain age, but after a while it may become fixed and, for some, become a part of who they are to the extent that they may become defensive (or aggressive) when someone points out flaws in their reasoning. As with the Brexit debate, once a belief becomes an identity forming belief, the process of rational deliberation in relation to the belief can become more challenging as discussions will have a stronger emotional element.

## 5.iii Identity, emotions and discussion

Emotions are more associated with system 1 thinking rather than system 2 (our reason). McCully writes about how emotions can impact discussions of controversial issues in Northern Ireland:

*“If emotions dominate, participants are likely to retreat into defensive, ‘tribal’ positions. By contrast if discussion is thoroughly rational there is a danger that politeness prevents real opinions being expressed and more contentious engagement is avoided.”* (McCully 2006:53)<sup>13</sup>

This idea can provide a useful scale to consider when discussing sensitive or controversial issues:

Too polite	Useful discussion is possible	Too emotional
No-one is interested. No true thoughts are shared	Discussers are interested, using reason and being open minded	Discussion becomes very defensive. Open minded critical thinking is hard to achieve

When speaking to an adult whose belief in a conspiracy theory or other types of disinformation has become part of their identity, then directly challenging the belief is not likely to be useful. The conspiracy theorist may become more emotional or ‘heated’ and is likely to become defensive and spend ‘cognitive resource’ defending the belief. This process can serve to further entrench the belief (the back-fire effect). This is why we suggest avoiding adversarial style disputes. It is better to try situating the discussion as one of being on the same side (that of critical thinking) and encouraging open thought.

Not much is known about young people and conspiracy belief (see [page 4](#)), but hopefully most young people will not hold conspiracy beliefs or other types of disinformation in a way that is

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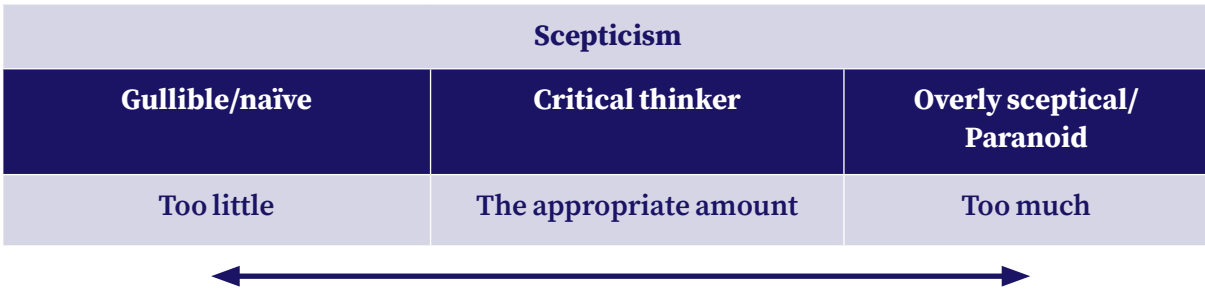
identity confirming. The length of time holding or thinking about the belief may not be that long. On the other hand, teens can adopt identities quite quickly and many are attracted to counterculture. So, putting forward a conspiracy theory may be part of a broader ‘alternative’ thinker identity. Much of the advice in this document takes the approach of trying to warn the young person about the dangers of aligning themselves too closely with a conspiracy theory and instead to see themselves as a critical thinker. One who likes to question assumptions and beliefs, including the conspiracy beliefs themselves. In this way the teacher can support the transition to the identity of a critical thinker.

The difficulty of simply dismissing a student’s ideas is that the student may become defensive and keep arguing to preserve face, or may even do more research to come back with stronger arguments. In this way the desire to prove the teacher wrong may serve to increase the belief of the student.

### 5.iv Conspiracy thinking and critical thinking

Often conspiracy theories do use elements of critical thinking ([system 2](#)). For example, pointing out anomalies in official accounts. Indeed, some conspiracy theorists would like critical thinking to be taught in schools as they believe that the masses are being deceived and critical thinking can reveal this. However, although conspiracy theorists may use elements of critical thinking to attack official accounts, the conspiracy itself is not subjected to the same level of scrutiny. This is an example of disconfirmation bias taken to the extreme. For example, David Icke may present some interesting reasons for why we might mistrust the financial system, but his belief that the world is run by Lizard Aliens lacks any suitable evidence or rational scrutiny.

Aristotle expressed a famous idea called the doctrine of the mean. It argues that any quality or trait can be taken to damaging extremes e.g. courage is generally valued, but a deficit of this is a vice (cowardice), and an excess is also a vice (being foolhardy). The best way lies in the middle (the mean). So being virtuous consists in having the appropriate amount of courage. This idea works well with the idea of scepticism. Too much and too little are vices. We want to aim for the middle, for being a critical thinker.



Conspiracy theorists seem to miss this middle on both sides. They become overly sceptical of official accounts or news sources whilst simultaneously underly sceptical of their own account of reality. This can be caused by a combination of confirmation bias, disconfirmation bias and belief perseverance.

The advice in this guidance is to steer the student towards the middle ground, that of a critical thinker.

## 5.v Should a teacher ever share their conspiracy beliefs? The answer (I would strongly argue) is no.

In a nutshell the answer is no! It would be inappropriate for a teacher to share a conspiracy belief or widely debunked story.

Conspiracy beliefs are quite widespread amongst the population. While one would hope that teachers would avoid belief in some of the wilder conspiracy theories, the large numbers of believers mean that in every school there are likely to be teachers who hold conspiracy theories. Indeed, research has shown this to be the case (Ballová Mikušková 2018)<sup>14</sup> and further that some teachers have even promoted conspiracy theories in their teaching (Berman & Stoddard 2021)<sup>15</sup>.

Teachers are free to give their opinion on many topics. There are lots of genuinely open questions on which there is no consensus in the academic community. Most political, moral, aesthetic and philosophical questions are open in this way. In these areas it is acceptable for a teacher to share their opinion, as long as it is clear that it is a personal opinion and not the 'correct' answer. (Also, it is important to only share an opinion in the context in which the teacher is confident that the lesson overall can achieve a balanced examination of different perspectives.)

However, many other topics are not 'open' in the same way. Teachers have an important role in representing an academic community. Where the academic community is in broad agreement on an issue, then the teaching should direct pupils to this agreement.

For example, a science teacher of faith who believes in young earth creationism (the earth is around 5,000 years old), would be expected, in their role as a teacher, to reflect the evidence and reasoning of the scientific community in the teaching of human evolution. This is part of their role as a science educator. Expressing personal beliefs that contradict the ideas of the academic community would be problematic. (This is not to say that teaching should always aim to develop belief in evolution in pupils. Evidence from the US suggests that pupils of faith can become defensive when teachers teach for belief (i.e. try to persuade student to adopt belief in evolution) and that teaching is more effective when the teacher instead emphasises that they are presenting the views of the scientific community and the reasons for those views.<sup>16</sup>)

If a teacher holds belief in a conspiracy theory that contradicts the evidence of the relevant academic community, then expressing these ideas is problematic in terms of their role as an educator. Of course, it is also likely to be problematic in terms of the likely reaction of the school community. Further still, schools are bound by the public equality duty, so promoting ideas that are associated with racist beliefs would be highly problematic.

For all these reasons sharing a conspiracy belief is not appropriate.

# 6. Common conspiracy theories

## Are conspiracy theories all the same?

Conspiracy theories come in all different shapes and sizes, but they can often overlap and individuals can believe more than one. Some conspiracy theories are linked to events, where the dominant narrative in the mainstream media, or public consciousness, is rejected. Others are linked to a fundamental distrust in science and pharmaceutical technologies (which has gained traction during the Covid-19 pandemic). A few theories act more as conceptual frameworks, which house others within them. Think of conspiracy theories as intersections at a railway junction where one train track — or theory — can connect and lead into another. Many also overlap, integrate and modulate to create ‘mixed, unstable or unclear ideologies’<sup>17</sup> which can pose new and undefined threats.

Below are summaries of the main conspiracy theories to listen out for among pupils, alongside advice on what they might say and how concerned you should be. A pupil may exhibit passive engagement with the theories — reading posts and watching videos from others — or they may be more actively posting on their own social media and trying to persuade their peers to subscribe to them. Listening out for what they might be saying could help you assess their level of involvement.



“Some conspiracy theories are linked to events, where the dominant narrative in the mainstream media”

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# Framework Conspiracy Theories

## **QAnon or ‘Q’**

QAnon, or ‘Q’ for short, originated in the USA in 2017 but has since gained global traction more recently — including in the UK. Those who subscribe to QAnon believe that a satanic, cannibalistic cabal of paedophiles run a global sex trafficking ring. Its followers subscribe to far-right ideologies and believe that former US President Trump was appointed to enact a ‘storm’, where the paedophile ring will be exposed and arrested (made up of Democrat politicians, Hollywood elites and high-ranking government officials). Followers of the conspiracy theory believe that a deep state agent named ‘Q’ is leaving bread-crumbs — or ‘Q’ drops — for them online to reveal the details of the imminent ‘storm’. Because believers are often far-right politically, many who subscribe to this theory believe in white supremacy and are deeply anti-Semitic and racist.

*What might you hear a pupil say?*

There are a few catchphrases which signal to others that you are a subscriber to the theory. Prolific QAnon believers on social media often sign off with ‘where we go one, we go all’ with a half-raised fist salute; students might mimic this gesture/phrase, or use the hashtag #WWG1WGA. QAnon believers will sometimes refer to themselves as ‘soldiers’ in the ‘storm’, reference reading ‘Q-drops’ or speak fanatically about Trump and the ‘stolen election’. Sometimes innocuous sounding slogans such as ‘save the children’ are used to entice people.

*How worried should you be?*

QAnon might be one of the more worrying conspiracy theories to gain traction amongst young people because of its connection to far-right radicalisation and its spill-over into violence (the Capitol Building attack in America was committed, in part, by devoted QAnon supporters). Research has found that whilst radicalisation and conspiracy-thinking are different categories of extreme thinking, QAnon is concerning because of the thought-processes underpinning it: one group is superior to another, one group is under attack by another and the threat is existential/apocalyptic<sup>18</sup>. QAnon is considered to operate more like a cult movement now, moving offline<sup>19</sup>. Given the racist theorising of parts of QAnon, even passive engagement with any QAnon posts could be a cause for concern.

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## The Illuminati

The contemporary incantation of this conspiracy theory is a loose set of beliefs about a secret society pulling the levers of power behind the scenes to establish a 'New World Order' of totalitarian and authoritarian control. The original Illuminati were a group of intellectuals in 18th century Bavaria but the name was playfully co-opted, and the conspiracy created, by a writer for Playboy in the 1960s<sup>20</sup>. It is therefore an easily debunked conspiracy theory but its iconography — a triangle with an outline of an eye at the centre — is often used in popular culture and many young people hypothesize about famous stars being part of this infamous, secret sect. Most recently, Beyonce and Jay Z are said to be members.

*What might you hear a student say?*

Anything relating to a secret society and reference to the symbolism might signal engagement with the conspiracy theory. Referencing celebrities who are supposedly involved is a common route into the theory for students.

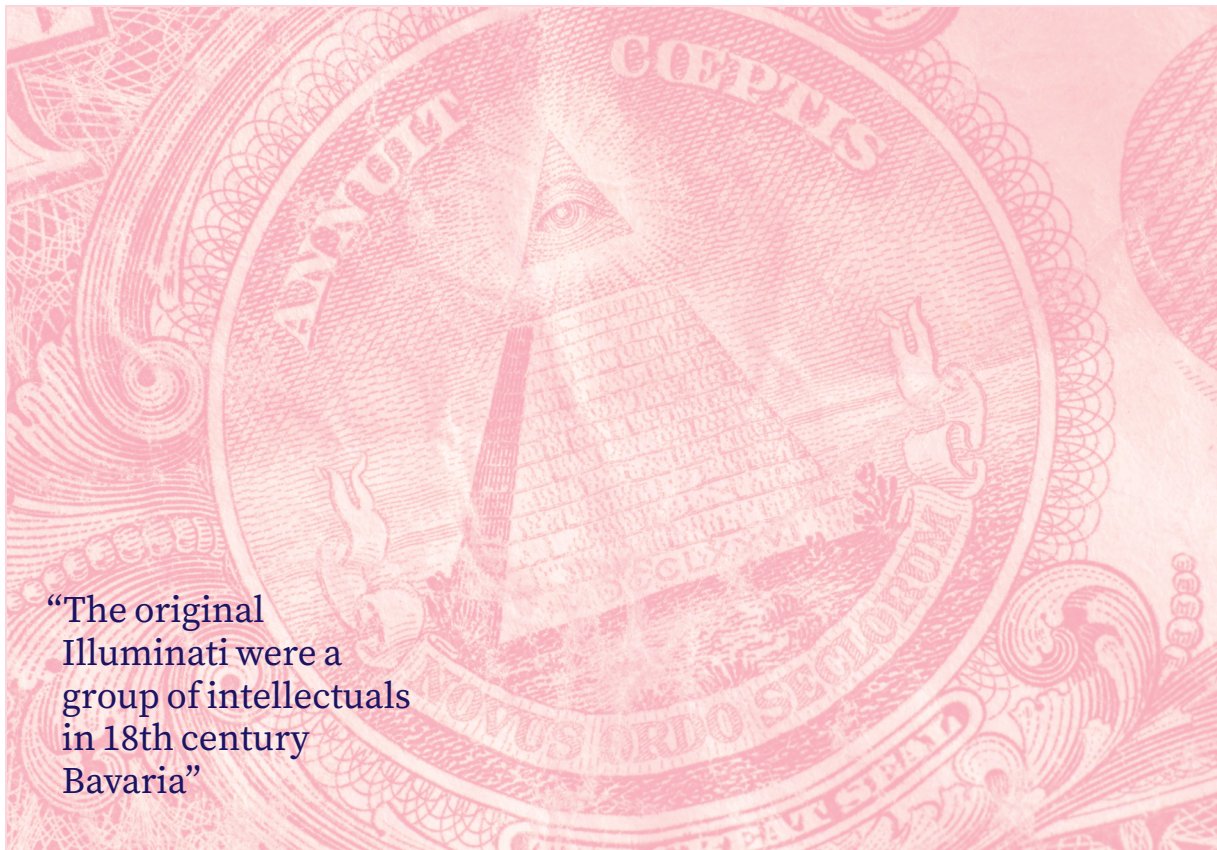
*How worried should you be?*

Overall, the theory poses minimal risk when engaged with through interest in symbols and celebrities. However, the 'New World Order' element can be anti-Semitic and therefore a pupil who is fully immersed, and actively posting about the illuminati, may say racist slurs about a Jewish conspiracy to run the world. This would signal high concern.

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“The original Illuminati were a group of intellectuals in 18th century Bavaria”

### **New World Order (including ‘The Protocols of the Elders of Zion’)**

The idea of a ‘New World Order’ appears in other conspiracy theories, and refers to the idea that there is an elitist and globalist agenda to consolidate power into one ruling world government, disbanding with sovereign nation-states. There are multiple sub-theories which claim to prove the creation of a New World Order: mind control techniques and the advancement of technology set to replace humans; mass surveillance regimes; the occult; political upheaval and the threat of a coup d’état. Gradualism, the idea that the move towards a New World Order is in small steps, is present in disapproval for world organisations such as the World Health Organisation (WHO). Part of this conspiracy theory is also the anti-Semitic belief that a falsified and debunked text from Russia in 1903 — *The Protocols of the Elders of Zion* — proves a Zionist ploy to take over the world.

*What might you hear a student say?*

Given the way this conspiracy theory has many divergent ideas collapsed within it, noticing what a student might say when they are engaged with it is difficult. It is likely that they will use the term New World Order and speak generally about a global take-over. Some anti-vaccine conspiracy theorists claim this medical technology is part of the take-over.

*How worried should you be?*

Given that the conspiracy theory has, at its foundation, a suspicion of globalisation and international bodies, it leans into racism easily and has cross-over with anti-science conspiracies which pose a present threat during a pandemic. Much like QAnon, this conspiracy theory can be a gateway to others.

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### **The Great Replacement**

Beginning in France with the novelist and political commentator Renauld Camus, the Great Replacement is an Islamophobic conspiracy theory which originated with the idea that Muslims present a threat to French — and by extensions white, Western — civilisation and culture. Having gained traction in the rest of Europe, believers proclaim that the white race is being systematically replaced demographically and culturally. For this reason, this conspiracy theory is popular with far-right movements and is white supremacist at its core.

*What might you hear a students say?*

Pupils who subscribe to ‘The Great Replacement’ will be Islamophobic and their hate speech may be linked to statements about white genocide, or ‘genocide by substitution’<sup>21</sup>. It is a white supremacist theory and racist and Islamophobic hate speech could signal engagement with these ideas. Adherents to the conspiracy theory believe that certain bodies are conspiring to achieve The Great Replacement, such as the European Union, and therefore aggressive Brexit (and anti-immigrant) support might be vocalised.

*How worried should you be?*

Given the continued threat of right-wing terrorism in the UK, the capacity for these sentiments to spill into violence is real. There are many far right political movements in the UK that could house a vulnerable pupil holding these beliefs, and therefore this conspiracy theory operates ‘offline’ too.

# Pseudoscience

## **‘Scamdemic’/‘Plandemic’ and The Great Reset**

The Covid-19 pandemic which swept through the world in 2019 is at the centre of this conspiracy theory. Believers in the ‘scamdemic’ proclaim that prominent world leaders orchestrated the pandemic in order to reformulate the global economy. It derives from a World Economic Forum (WEF) plan titled ‘Great Reset’ on how countries can best recover, economically, from the impact of the virus. Posts on social media have claimed that world leaders are using the virus to push forward with, in their view, damaging socialist and green policies. Some popular YouTube videos, such as one called ‘Hold Up’, undermines scientific claims by suggesting the pandemic was planned by global elites and masks are dangerous to their users.

## **5G and Covid-19**

As 5G was rolled out across the UK, the erection of multiple phone masts was falsely connected to the spread of Covid-19 by 5G conspiracists. Proponents of the theory claim that 5G technology (rather than a virus) causes the disease, or exacerbates the illness. This online misinformation spilled over into real-world violence. It is reported that between April 2nd and April 6th 2020, 20 phone masts were damaged<sup>22</sup> by those who believed they caused/worsened Covid-19.

*What might you hear a student say?*

The pandemic has led to a wealth of misinformation online relating to the virus and its (false) connection to 5G and the vaccines. Pupils might find themselves engaging with misinformation relating to some, or all of the above: a pupil who engages with 5G conspiracies could be compelled by misinformation surrounding the vaccine — there is ample space for cross-contamination.

*How worried should you be?*

The biggest concern would be if public health messaging is not reaching pupils because they are minimising the threat of Covid-19 due to misinformation. Some celebrities have also contributed to the online spread of misinformation, such as Kanye, M.I.A. and famous TikTok stars. This can give the falsehoods more clout and popularity. Pupils may flirt with social media posts which make fake claims but active promoting of these false claims, about the virus and the vaccines, should trigger concern. Much like the other conspiracies detailed above, anti-Covid and anti-vaxxers have found a home in QAnon and therefore pupils may be vulnerable to falling for other conspiracy theories too.

### **Anti-vaccine**

The Anti-Vaccine movement has gained traction over the course of the Covid-19 pandemic, given the speed of the covid-19 vaccine development and the publicity surrounding its roll-out. The level of opposition to the vaccine varies: some anti-vaxxers, as they are nicknamed, claim concern over experimental ingredients and unknown side effects, whilst others believe that the vaccines microchip individuals and are another tool in a global elitist take-over. Those on the extreme end of the spectrum sometimes believe that Bill Gates funded the vaccine to enable this microchipping technology.

## Single Events Conspiracies

Many conspiracy theories centre around claims that events didn't occur, were orchestrated by nefarious governments or transpired in ways not known to the public. These include the theories that Princess Diana was killed by the Royal Family, Jeffrey Epstein's death in jail was not by suicide (but orchestrated by those who wished to see him dead to protect their own involvement in his criminal activity), the moon landings were falsified by the US government, the Sandy Hook shooting was not real and performed by actors and 9/11 was orchestrated by the Bush administration and/or the CIA.



“The Anti-Vaccine movement has gained traction over the course of the Covid-19 pandemic”

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