

Fact-checking for educators and future voters

FactBar EDU. Elections approach – are you ready? Fact-checking for educators and future voters

Version 1.0 (adapted from Finnish, original Finnish version: Vaalit tulevat – oletko valmis? Faktantarkistusta kouluille ja opettajille)

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Foreword

Welcome to the FactBar EDU for "voter literacy" and participation.

Finnish fact-checking organisation Faktabaari (FactBar) has since 2017 adapted professional factchecking methods for Finnish school environments with educators to cover the elections. While Faktabaari sees methodological fact-checking already as such encouraging critical thinking, the #EDU voter literacy project has pushed Faktabaari

and partners to link factchecking and media literacy best practices further in view of elections.

The EDU voter literacy project firstly developed our fact-checking method even more transparent and recent fact-checks to include more justifications to the choices and tools applied. Secondly the co-operating with professional educators enabled to integrate fact-checking elements to

school curricula - for future voters. As a result we believe this joint efforts with French Finnish school provided a promising pilot for a distinct media literacy stream we call "voter literacy" while giving our fact-checks also an afterlife as pedagogical material and as examples.

The novelty comes on building from transparent fact-checking methods, international frameworks and existing media literacy materials to better tackle the information disorders. We introduce methodological fact-checking to future voters and empower the future voters and their educators with tools to build awareness. We encourage them to think and check themselves while providing examples, collecting already made materials and existing open source verification tools. This toolkit supports educators to empower future voters to build trust and provide skills and terminology to resist a potentially self-fulfilling and lazy labels like "F*kenews".

We introduce methodological factchecking to future voters and empower the future voters and their educators with tools to build awareness.

This voter literacy toolkit is also compatible to the "European approach to tackle online disinfomation" where European Commission communication "encourages independent factcheckers and civil society organisations to provide educational material to schools and educators". As open source material it has been already applied in primary and secondary school teachers while pilots in regards high schools and true life-long learning

are planned.

The toolkit can also ink e.g. fact-fact-checkers and media educators like drafting it did in Finland for translated pilot materials, Materials include also European elections both uniting EU citizens while having a significant impact to the lives of future voters, but also based on Faktabaari experience showing that these transnational elections are

particularly sensitive to mis- and disinformation.

We offer you the first fact-checking voter literacy toolkit compatible to a world known and lately revised Finnish educational curricula with a view to start a debate on scalability, what could be applied to the simple transparency principle driven approach to foster truth seeking and participation among the youth.

Let's empower the future voters that will adapt the democracy to the digital age including their new media habits and with the support of the privacy protection Europe tries to show example when fighting information disorders and protecting freedom of speech.

We want to thank IFCN community for inspiring fact-checking transparency standard, Council of Europe and First Draft for important Information Disorder report inspiring our adapted vocabulary for fact-based public debate and voter literacy and many colleagues in Finnish and European colleagues contributing to our collaborative efforts.



defective information or 'mistakes' (misinformation)



deceptive information or 'hoaxes' (disinformation)



damaging information or 'gossip' (malinformation).

FactBar EDU traffic signs for mis-, dis- and malinformation vocabulary needs needs then to be domesticated for respected languages and audiences by the users.

The launch of this English "voter literacy" toolkit takes place at the Brussels "Fight disinformation with media literacy" event November 13th 2018. The event present a first occasion to evaluate and and further develop this new media literacy stream within an open source FactBar EDU community with you. Welcome to build a FactBar EDU voter literacy approach from our bottom-up pilot. Cheers. Mikko Salo, Faktabaari Founder, Member of the independent High-level group on "Fake news" and online disinformation mikko@faktabaari.fi Kari Kivinen, Director of the French Finnish school of Helsinki & the former Secretary-General of the European school network kari@kivinen.net More: www.faktabaari.fi/edu @FactBar

Introduction

We're living in an age in which clear and simple facts have become an endangered species. The amount of communication has increased considerably under a short period of time – suddenly we have countless channels at our disposal and the quality of mass communication has become a mainstay in public debate. We're all familiar with the terms 'post-truth or post-fact age' and 'fake news' but what people might not know is that these terms are also employed deliberately in order to undermine people's trust in real news and open society. That is why we attempt to replace them with the 'ddd terminology' (subject to be improved).

Children and adolescents are exposed to communicational influences from an early age, and hence they require support in order to be able to distinguish reliable from unreliable information as well as between sincere communication and deliberate manipulation. The young people of the 2010s are living in a difficult communicational environment: baseless rumours are ripe in WhatsApp groups, YouTubers are regarded as eminent authorities and websites masquerading as news services hold the banners of information warfare aloft. These days it is possible to come across even adults who regard mistakenly climate change as a conspiracy, colloidal silver as a healing substance and vaccines as a possible cause for autism.

This material is intended to facilitate the educational process wherein future voters are taught multiliteracy and critical, diverse thinking. Its primary target groups are the Finnish primary (grades 4 to 6) and secondary (8 to 9) school teachers based on the curriculum of these grades. However, the material is still suitable for other grades – or even adult education – either as such or with minor alterations.

The present material was inspired by the material for the Finnish Faktabaari EDU project. It is largely based on the teaching methods and activities developed in long-term co-operation between the HRSK (the French-Finnish School of Helsinki) and the fact-checking service Faktabaari (affiliated with Avoin yhteiskunta ry), and which were tried out in practice in 2016-2018. Other related and open media education resources will also be referenced.

The material was prepared as part of a project cofunded by the European Parliament. The purpose of the project is to support the European Parliament Ambassador School programme (EPAS), especially in the run-up to the 2019 EU elections. The material has been published under the Creative Commons - Attribution 4.0 licence and may be freely redistributed, copied and used, provided that FactBar EDU is mentioned as the source. Faktabaari is a non-partisan fact-checking service, which aims for the greatest possible degree of transparency. It is affiliated with Avoin yhteiskunta ry, which is a non-partisan NGO seeking to monitor and increase the transparency of information and decision-making in different sectors, and thus to further and develop transparent operational models for societal needs. FactBar EDU is an independent developing project which makes use of the experiences of the Finnish FactBar EDU internationally with other operators in the field like you.

1. Fact checking and schools

1.1. National core curriculum

The following teaching material was originally made to support the Finnish national curriculum (renewed in 2014 and introduced in 2016).

One of the paramount functions of a Finnish school is to educate its pupils to become participating and active citizens. Fact-checking promotes the following skills:

- A. Thinking and learning to learn
- B. Cultural competence, interaction and selfexpression
- C. Multiliteracy
- D. Participation, involvement and building a sustainable future

Thinking and learning to learn

The learning and development of critical thinking and argumentation are of especial importance.

"Encouragement is also needed for facing unclear and conflicting information. The pupils are guided to consider things from different viewpoints, to seek new information and to use it as a basis for reviewing the way they think." (NCC 2016)

For example, the pupils are asked to:

- 1. clarify unclear information and paraphrase arguments (e.g. when evaluating electoral or advertising campaigns or blog entries)
- 2. recognise and evaluate arguments they come across in communication
- compare mutually opposed claims about reality and defer to their own judgment when evaluating contradictions (e.g. by referring to facts)
- 4. practise metacognition; that is, the contemplation of their own way of thinking and the conscious reflection of opinion-forming

Cultural competence, interaction and self-expression

Cultural competence denotes the ability to tolerate differences and diversity in others, constructive interaction skills and the all-round development of self-expression. Human rights and media education are especially prevalent approaches in this module. The evaluation of the ideological input in communicative influencing is a good example of the implementation of this module.

This learning module may employ the following activities in which pupils are asked to:

- analyse how opinions and philosophical outlooks may vary, and evaluate what is purely a subjective matter and what isn't (e.g. by evaluating news and electoral websites)
- 2. learn to recognise and evaluate ideological or biased communication in contrast to communication which aims for a more neutral or objective approach (e.g. by comparing advertisements, so-called 'fake news', matters of pure opinion and responsible journalism)
- 3. examine and evaluate how different values and backgrounds affect the way we communicate
- 4. examine and reflect what kind of repercussions communication can have.

Multiliteracy

The term multiliteracy used in the Finnish national core curriculum is a good way to describe the challenges and requirements that the modern communication environment imposes on children and adolescents. In addition to traditional written text, they are expected to interpret and evaluate other types of communication and media texts and to have the competence to handle a great variety of media and communication channels. This is how the curriculum describes multiliteracy:

"The pupils need multiliteracy in order to interpret the world around them and to perceive its cultural diversity. Multiliteracy means abilities to obtain, combine, modify, produce, present and evaluate information in different modes, in different contexts and situations, and by using various tools. Multiliteracy supports the development of critical thinking and learning skills." (NCC 2016, p. 22)

In a classroom setting, the teaching of multiliteracy can include activities where pupils are asked to:

- recognise and evaluate when they are being targeted by persuasive messages and influencing (e.g. by being a subscriber to a YouTube channel, by belonging to a WhatsApp group or by sharing Internet memes)
- 2. create targeted, multi-channel content by using different media
- learn different types of communication (e.g. by evaluating news, advertisements, electoral campaigns and performances) and practising them.

Participation, involvement and building a sustainable future

Pupils are guided and given the motivation to become active and participating citizens in a way which shows that their input and involvement can have an impact.

"Participating in civic activity is a basic precondition for an effective democracy. Skills in participation and involvement as well as a responsible attitude towards the future may only be learned by practising." (NCC 2016, p. 24) This can mean, for example, the following activities:

- 1. participating in social events and observing them
- 2. learning about political and social processes in practice, as closely as possible
- practising political processes, e.g. campaigning and voting and the evaluation thereof

1.2. Fact-checking and learning critical thinking

Firstly, let us clarify the concept of 'critical thinking'. Many people seem to be labouring under the misapprehension that 'being critical' means being flat-out negative about a certain topic. On the contrary, the proper definition of 'critical thinking' denotes carefully balanced and analytical thinking. Unfortunately, learning and teaching critical thinking is rather challenging because treating it as a traditional subject to be taught usually ends up in failure. For instance, a pupil may well understand the importance of critical thinking and notice if someone else is lacking in it. But when it comes to themselves, they may be completely uncritical in practical situations.

In this respect, critical thinking is a practical subject and the teaching should reflect this. The practical exercises should be carried out in diverse contexts and situations to prevent the critical abilities from becoming too limited in their scope. The best way for the pupil to learn all-round critical thinking, regardless of the context, is to apply homogeneous and simple methods of critical thinking in different subjects, themes and events.

What is fact-checking?

Fact-checking denotes a process of research which strives to gain a thorough understanding of the truthfulness or likelihood of, for instance, a claim made in public. For example, different fact-checking processes are utilised in journalism, where the fact-checkers make sure that the content created by the editors and journalists remains factually accurate. Factchecking has branched out beyond journalism, however, and plenty of civic activism has developed globally in conjunction with it. Specific codes of principles have been developed for factchecking (e.g. IFCN) which seek to distinguish between proper fact-checking (which aims for objectivity) and other investigative journalism dealing with facts.

Many fact-checkers are themselves former journalists or researchers. The most common targets of fact-checking are for instance political topics, the promises and assertions made by politicians and scientific claims – in other words, all claims and assertions which can be based on facts or scientific expertise. The outcome of the process is always intended to be as impartial and truthful an evaluation of the claim as possible.

Fact-checking has become even more significant in today's communication environment, which is both polarised and inclined towards populism. Social media and communication technology have made it possible for baseless claims to spread like wildfire. The upshot is that both social media and traditional journalism have become instrumental in deliberate information operations (or even in the so-called hybrid warfare).

Fact-checking process

The fact-checking process usually begins when a fact-checker receives a tip-off or a request to check the facts of, say, a public speech by a politician. The tip-off or request can be received through a contact form or via social media. AI-based searching tools have also been developed to aid the search for claims which require fact-checking. Because it is impossible to check each and every fact, the fact-checker has to narrow down the checking process (as transparently as possible) to the most important, critical and relevant statements – for example to statements which have received a lot of media coverage and attention or which are otherwise noteworthy. The first phase is to define the fact that needs checking.

The fact-checker needs to paraphrase the claim, that is, what is actually being said in the statement, text or recording - in other words, to summarise the content in such a way as to reduce it to a true/ untrue statement. As a result, fact-checking does not deal with questions, wishes, conjecture, suggestions, personal interpretations, speculations about the future and so forth. This all goes to show that careful scrutiny and evaluation are expected from the factchecker. They also need to be able to recognise which claims are factually verifiable in general, and which are simply interpretations based on personal views. Fact-checking is possible normally only if there are public and sufficiently reliable sources with which to evaluate the claim. After the claim has been carefully defined, the second phase begins. In this phase, the fact-checker needs to find out what kind of sources can be considered relevant. For example, open official and legal sources, officially and impartially prepared statistics, scientific research and experts working in research institutes all constitute good sources for a fact-checker.

However, when it comes to experts by experience, which have become more popular in today's journalism, the things get slightly tricky. Referring to experts by experience – whom, for example, adolescents may trust more than official experts – in fact-checking is problematic. Even though the facts can be sometimes discovered through personal experience, the experts by experience usually provide an interpretative framework and narrative, which means that their role is not to supply facts but rather to give them a form – which can be used to suit the journalists own purposes. Due to the excess of contradictory information available, the fact-checker can have recourse to an information specialist – an expert in how to evaluate and search for sources. A properly trained information specialist can help the fact-checker to find the relevant links, statistics, decrees and articles efficiently. In evaluating the sources, the factchecker has to exercise source criticism. It usually helps to have a check list which lists the criteria for the relevance and significance of the sources.

The third phase of fact-checking involves contacting experts who can help to place the claims in their respective contexts. Written sources are not sufficient for proper fact-checking and hence it is advisable to let at least two independent experts to go through the claims and source material. By having recourse to experts when interpreting claims, it is possible to avoid biased outcomes that are caused by complacency.

There is no such thing as a completely neutral expert. However, even though an expert might be driven by a certain agenda or ideology, it does not render them useless and cause their views to become automatically false. This is the main motivation behind using more than one expert, preferably from different organisations. If the views of different, independent experts coincide, the fact has been verified and it could be said that there's at least some degree of consensus in the matter, that can be referred to. Naturally, absolute truth cannot be attained by this process but it still ensures that the information is trustworthy and verified by different sources.

In the fourth phase, the fact-checker usually draws up a fact-checking report, for instance a blog post or a newspaper article, wherein they state clearly the checked claim, the sources used in the process and the views of experts regarding the claim, its background and the proper context. Before publishing it, the report will be placed under expert scrutiny to ensure that everything is as it should be.

Fact-checking reduces false information and manipulation

Fact-checking is conducted to ensure that, for instance, decisions are not made based on unfounded claims and that citizens could access trustworthy and accurate information. Factchecking is also a potent weapon against unethical information operations – e.g. propaganda and incendiary 'fake news' – and deliberate misleading.

The fact-checking processes of Faktabaari yield three kinds of conclusions in relation to the checked claims: true, untrue or '50/50'. To demonstrate the differences, Faktabaari uses a so-called traffic light scale for potential misinformation (see later also defective information and "mistakes").

- A true claim holds true in the context and there are sources to support it. But since fact-checking deals with very specific contexts, the claim can still be untrue in another context.
- 2) An untrue claim is clearly false, i.e. the source material and the expert statements are at odds with it. The claim can be either a deliberate lie or simply a careless slip: factchecking may not be able to pinpoint the motivation behind the claim.
- 3) A 50/50 claim includes factual information but it cannot be regarded as completely accurate. This is especially common in the case of over-simplified views. For example, if an expert states that the claim cannot be either verified or refuted or that it is considered ambiguous or the source material is conflicting, the verdict is usually 50/50. So it is not a matter of being 'half true', but rather about not being entirely verifiable or certain.

There are also claims that simply cannot be checked or the verification wouldn't be meaningful from the point of view of public debate. It is a common custom in Faktabaari to write a blog entry to provide some background for these claims and themes, but in such a way as not to give too much coverage for misinformation or even disinformation (see below).

The misleading information which emerges related to fact-checking can be divided into three different categories:

- a) defective information or 'mistakes' (misinformation),
- b) deceptive information or 'hoaxes' (disinformation) and
- c) damaging information or 'gossip' (malinformation).

The most harmless of the lot is defective or misinformation which may be spread ingenuously or out of carelessness, without any deliberate or harmful intentions. Such claims are often based on misconceptions and the people who spread them usually attempt to correct their statements upon discovering them false.

Deceptive or disinformation, on the other hand, is deliberate mendacity or so-called 'hoax' aimed to damage, harm or mislead public debate or to sow discord between people. Those who resort to it are conscious of its falsity. For example, the production and distribution of 'f*ke news' could easily be categorised as disinformation. Baseless 'fake news' accusations are also part of the same information discord as the production of these 'news'. Both are intended to fuel confusion, uncertainty and gratuitous scepticism towards reliable reportage and official news sources (such as official announcements or research data).

Damaging or malinformation is the most challenging of the three from the point of view of fact-checking, because it can easily be accurate. Malinformation consists of usually truthful information that is spread unlawfully, with malicious intent or for a deliberately damaging purpose. The damage can be done by, for example, manipulating or twisting the context or the interpretative framework. The aim is therefore to show facts in bad light by distorting the reference points or the criteria for evaluation.

It would be a good idea to elucidate the concept of malinformation to pupils with reference to gossip and bullying. Hate speech is also a related concept because it literally relies on arousing the feelings of the listeners. In many cases deceptive or disinformation paves the way to hate speech.

It is difficult to gain lawful protection from defective and deceptive information, whereas damaging information and especially the so-called hate speech is deemed unlawful almost throughout the EU. The 'unlawful' stamp facilitates the aid of the victims of malinformation, sometimes very creatively so, like in the case of using algorithms.

The foregoing categorisation is not exhaustive but it is a more analytical and to the purpose than the somewhat harmful 'fake news' tag. The widespread use of this tag usually sparks needless distrust even towards responsible, fact-based journalism. Even the sheer wording of 'fake news' may activate the critical and resistant side of the reader: What's this all about? I'm not being duped, am I?

Pedagogy of fact-checking and critical thinking

As stated above, the direct teaching of critical thinking is often challenging – the theory does not easily translate into practice. The common obstacle for the transfer of learning is the distance from personal experience and that the pupil cannot internalise critical thinking as a simple and unambiguous method. For critical thinking to transfer effectively from one context to another, the pupil should be able to understand it as (for example) a set of rules which can be used universally.

The pedagogical use of fact-checking in schools is a great way to meet this particular challenge. In the fact-checking process, critical thinking has been simplified into an easy-to-understand rule which can be applied in the same way regardless of the context.

But moreover, it is simply fun and motivating for children and adolescents. The HRSK found that pupils found the so-called 'psych or "got you" moments very rewarding when they could pinpoint false claims in the checking process. Thus, factchecking turns into a fun game where the aim is to catch a public speaker out in false or simplified statements or misunderstandings. However, the idea is not to teach pupils to laugh at others' mistakes. Fact-checking encourages pupils to be careful, check statements and spread only verified knowledge. The idea is to support and increase responsible participation on digital channels.

Employing the fact-checking process in teaching has plenty of pedagogical advantages. Due to its demand for perseverance, it can teach pupils to be systematic, careful and attentive just as well as any other project-based classroom exercises. A participating and active connection to topical, often social phenomena and actual claims (e.g. covered by the media) makes the teaching particularly relevant and motivating in terms of media education.

The process itself supports learning on many levels. For example, when pupils have to recognise, clarify and reflect on the claims which are under fact-checking, and also to connect these claims to references and reasoning, their verbal and argumentative thinking is developed considerably at the same time. Because factual claims and other, non-factual claims are separated in the process and their truthfulness is taken to be something a bit more than a mere question of truth or falsity, factchecking offers an effective and practical way of teaching the public concise, analytical thinking that is not simply black and white.

In the fact-checking process, pupils are left to look independently for the sources by which to verify the claims. Activities of this sort support the capacity for data searching and processing and the development of source criticism and sound judgment.

In terms of learning critical thinking, there is an important aspect which usually receives very little attention in the literature of critical thinking: emotional skills and the related education. An emotional skill, which is a valuable asset in learning good thinking skills, has to do with the way uncertainty and complexity make us anxious. If this anxiety is not treated properly, an anxious person may seek a solution from, say, hasty conclusions or oversimplified binary arguments or they may avoid reflection altogether.

Using the fact-checking process in education at best helps pupils to normalise uncertainty and complexity around us, and thus render such things less threatening psychologically and more manageable emotionally. The fact-checking process teaches pupils, in and outside the classroom, to deal with uncertainty and complexity with analytical composure. The involvement in the fact-checking process enables pupils to develop the ability to control the so-called emotional reactivity – our inherent inclination to form opinions based solely on our own feelings ("It's true because I feel like it!"), which has become symptomatic of the so-called 'post-truth age'.

The fact-checking process, on the other hand, demonstrates pupils our tendency to act and form opinions based on a shaky factual foundation. These kinds of practical demonstrations help pupils to understand what this informational uncertainty is in practice, and consequently how to manage uncertainty in a safe manner. At best, such methods can prevent radicalisation by undermining the credibility of the increasingly popular binary and simplified arguments, and by offering tools to dismantle such arguments. In conjunction with this, pupils can also be taught about the nature of the scientific process – a process which factchecking emulates to a certain degree.

When teaching critical and careful thinking, it is paramount to support a pupil's identity as a critical and able thinker, and to provide the sufficient wherewithal to bolster this identity in different contexts. The best way to achieve this is through





experiential learning: by providing pupils with experiences of success in critical and painstaking thinking. Good pedagogy conjoins these experiences with experiences of challenge, that is, experiences of how critical thinking always requires special effort and determination to achieve criticality – that being critical is never something taken for granted or something that automatically leads to success.

Above all, it is recommended to give pupils enough examples, points of reference and clear contrasts through which they will eventually learn to distinguish between good and lacklustre thinking, argumentation and opinion-forming, and to encourage them to monitor and change their opinions when necessary. The ability to reflect, seek for and revise different mistakes in one's way of thinking is one of the most relevant thinking skills and one of the main requirements for learning to learn. It is a superb antidote to passive, 'post-truth' rhetoric and it also encourages development and participation.

2. Classroom activities for fact-checking

2.1. Fact-checking process at schools

Full-scale, journalistic fact-checking is usually too demanding to be carried out in schools. To reflect this, we have created a classroom-friendly version of it by slimming it down and making it easier to understand.

In this chapter, we will introduce the process in a way which adapts to the classroom setting. We will see how each phase could be applied and made more particular in different subject lessons. In addition to that, we will discuss what kind of content could be easily included in the teaching to support it. Finally, we will introduce the multidisciplinary learning module made by the HRSK in connection with fact-checking and the elections.

If fact-checking has stimulated your interest, we can thoroughly recommend you to ask fact-checkers to visit your school and give fact-checking training to your pupils. Those who have received the training have considered it interesting and even exciting . For example reference to Sherlock Holmes type of investigative work has inspired younger "factcheckers". This training module has been designed to support the curricular goals and content in line with the lifelong learning skills on the EU level.

2.2. Fact-checking by numbers

Here is the simplest way of carrying out a factchecking process in a classroom setting:

- Select a claim that you want to check
- Examine the claim using different sources
- Write a fact-checking report based on the discoveries
- Present your findings to the rest of the class for the final verdict
- Publish and share the results, e.g. as a blog text or a presentation paper

This kind of by-numbers approach can be easily adapted as an activity for, say, social studies lessons as such. But to make the most of the fact-checking process, it is necessary to go more in-depth into it and to use the process in different contexts. Here are some examples of how to extend the bynumbers approach:

1) Select a claim

The claim can be picked by the teacher or the pupils can choose their own. Simple and easy claims are quickly checked, so in order to make it more challenging, more complex and ambiguous claims can be picked later.

By checking the claims more carefully, pupils are gradually made familiar with argumentation and rhetoric, for example. When statements are pulled to pieces, analysed and interpreted in a group, the multivalency of language quickly becomes apparent to the pupils. Even slight changes in the way claims are made can make a difference between a factual statement and an ambiguous interpretation, and so the pupils should be familiar with, for example, how the interpretative frameworks work in communication.

It is important to help the pupils to break the claims down into smaller argumentative constituents. The claims can comprise multiple parts or they can be ambiguous, and so the pupils need support in how to divide the bigger statements into smaller parts.

To make things more exciting, different sources can be used for the claims, for instance:

- Newspaper interviews with politicians
- Videos by YouTubers
- Social media, news websites and blogs
- Rumours and chain letters circulated in social media
- Even school books or non-fiction works

Then there's the entertaining and educational 'fake news game', Get Bad News (https://www. getbadnews.com/#intro). GBN is a game in which you can become a fake-news tycoon by slowly increasing the amount of your social media followers by posting provocative and untruthful tweets, creating fake profiles and founding news sites.

in the simple act of opinion-forming. It is of especial importance to teach the pupils about the psychological confirmation bias, that is, how our desire to believe or disbelieve in something distorts our interpretations and leads us to look solely for evidence which supports our own views.

Another relevant psychological phenomenon is the bias blind spot: it is difficult for us to realise our own bias and so even biased conclusions appear

2) Examine the claim

When examining the claim, the pupils can pull the claim to pieces and interpret it under the teacher's supervision so that the statement can be reduced to something more readily understandable. They are also asked to look for relevant sources by which

to prove the truth or untruth of the claim. Some lessons can be dedicated to the use of, for instance, Wikipedia or search engines, but it is best to look for other sources too, considering the problems the aforementioned tools can have.

A good activity to support the development of critical thinking with pupils would be to draw a picture or other visual presentation of how far the pupils themselves are from the origin or direct observation of a certain claim. It is advisable to demonstrate how knowledge, even at its best, is a 'telephone game' and how different interests can mess up with the course of information. One way to demonstrate this would be to simply count the steps between a person who reads the news and the original source of information, and through how many people the information has been processed.

It is on the whole recommended to discuss carefully with the pupils what constitutes a good or sufficiently reliable source. Full objectivity and impartiality in this kind of exploratory work is difficult to achieve – just as it is difficult

Full objectivity and impartiality in this kind of exploratory work is difficult to achieve

to us in a real, objective light. Hence, when checking the facts, one should be careful to look for mutually independent sources and to verify one's interpretations of them with sufficiently impartial experts. It is good to test the way we think.

Now we can see that an effective lesson in itself is to learn data searching, narrowing down (or broadening) the search criteria, using suitable reference databases – in other words, learning the basics of detective-work and investigative journalism. It is also worth pointing out that teachers are trained, knowledgeable authorities on the subjects they're specialised in, and bringing this fact up in class can have an eye-opening effect.

Evaluating the reliability of, for instance, Wikipedia can also be a good classroom activity. Anyone can upload information on the site, and not every Wikipedia user has proper expertise on the topic they're writing about. This causes the quality of the articles to vary considerably. Pupils could also edit Wikipedia articles on sandbox pages as a form of activity.

Teachers could go through different articles in class and help pupils to examine whether the article's sources are adequate, what the editing history of the article tells about the writers and their motives, whether or not there's a consensus on the topic and what are the possible biases in the article.

What does Source A say about the claim:	In favour	Both
What does Source B say about the claim:	In favour	Both

3) Check the facts

When the relevant sources for the claim have been found, it is time to start checking the facts. Pupils could be asked to find what things, statements and evidence in the sources are in favour or against the claim, and to collect them all in a table format so that all statements can be accurately traced back to the source.

This is a fairly straight-forward yes/no arrangement in relation to the evidence. Listing and evaluating the evidence in a such simple way as an exercise is a wonderful way to teach objective and argumentative thinking and how to bypass one's own biases. When the pupil gets to witness how the evidence eventually leans towards either conclusion or when the real state of things remains ambiguous in spite of the evidence, they learn how facts are independent of opinions and intuitions.

5) Publish and share the results

Writing and publishing checked facts as blog posts or making a poster out of the results would be a good classroom activity. Such publications would enable, among others, the practice of turning journalistic texts into visual posters or even video reports.

After thus conducting the fact-checking process, it would be advisable to recap with the pupils what

they've learnt and to reflect how a process of this kind is also related to everyday opinion-forming. Good topics for discussion would be, for instance, all the ways with which such fact-checking could be carried out outside the classroom.

- Learning objects about facts, hoaxes and media-critical thinking
- Mother tongue and media education

Media bias

When teaching pupils their mother tongue, deliberate playing with media bias and its examination could be a good classroom activity. A 'bias' denotes the manner in which a news story or, for example, an online article deviates from the principles of neutral and objective reporting and how it attempts to influence the opinions and feelings of the reader through manipulation.

Detecting a bias can be really difficult and is often open to interpretation. A common way in which a bias can be present in news reporting is the wording. Through little emotional nuances and connotative exploitation, a report can affect the way the reader perceives the news. For instance, a reportage about age groups, political parties or certain other topics can be biased and thus give the topic a strong, positive or negative emphasis. If the media gives more coverage to certain things or viewpoints at the expense of others, by publishing positive or negative news about these things considerably more often, it is also counted as a bias. It is difficult to avoid biases in journalism, because the general world view and attitudes of the writer are unavoidably reflected in the text. However, all good journalism attempts to avoid such bias as well as possible. A good way to teach the detection of biases is 'through an inside job': allowing the pupils themselves to create biased content.

Here's an example on how to teach the detection of bias in class:

- Firstly, pupils are asked to compare neutral and biased news about a certain topic and to observe what factors (words) bring about the bias.
- 2. Secondly, pupils are given neutrally composed articles (e.g. as a group activity). The pupils are then asked to make the article biased by altering the wording slightly, adding frameworks and changing the reference and viewpoints. From the perspective of learning, it would be best if the pupils had to create both positive and negative biases for the same article, if time permits.
- 3. Finally, the biases are presented and analysed with the rest of the class, who then proceed to reflect how similar biases can exist e.g. on Wikipedia, websites, YouTube channels or in everyday online communication.

What you need for such activity:

- neutrally written and 1 biased article about the same topic
- short, neutrally composed news articles for the group

What does it teach:

- critical thinking and media literacy
- how to detect biases in communication
- word processing and rhetoric

2.3. Hoaxes, 'f*ke news' and information operations

The so-called fake media and 'f*ke news' have engendered lots of attention in recent years, and likewise how real news are so called. These could make good and interesting classroom activities if pupils were asked to see how and why actual disinformative and malinformative 'fake media' work and how they co-operate with social media. At the same time, the way they appeal to the natural desire to share emotive content becomes apparent.

The manner in which 'fake news' and 'fake media' work in general is very simple. A provocative or emotive headline gets people to click and share the news, thus increasing the advertising revenue of the websites publishing the content. Unfortunately, instead of requiring factual news, people seem to be more drawn towards emotive articles regardless of their truthfulness. Studies have shown that an untruthful news article is shared a lot more on social media than a factually accurate one. At the same time, such media are utilised in information operations and propaganda, for example to stir up prejudice and negative emotions towards different groups of people. Here's an example of an interesting way to put this information into practice:

- 1. Firstly, the pupils discuss what kind of experiences they have of 'fake news', baseless stories or false information that is spread in social media. They could also discuss their experiences of possible hoaxes, frauds and baseless stories they've encountered in social media.
- 2. Then, the teacher could demonstrate how to recognise a hoax, 'fake news' or an attempt to influence the reader:
- The headline and pictures are powerful, emotive or provocative, the topic of the headline is current and the headline uses 'too easy' black-and-white simplification or it includes a rhetorical question. In this context, it is advisable to discuss how the headline and its emotional content alone are sufficient to affect the reader and how people might not even read the articles before already sharing them on social media.
- The content of the article is anonymous, its arguments don't refer to any sources and it offers a one-sided view on the topic, without any alternative viewpoints. Simple fact-checking could easily be carried out at this point.
- The context, tone or publishing platform of the article are dubious it might be conspicuously apparent, for example, that the article wishes to engender emotions and stir up certain attitudes.
- 3. Lastly, it is recommended to inform the pupils what are the consequences of sharing 'fake news' and why their distribution should not be treated indifferently. The three types of harmful information mentioned above would come in handy in this context: misinformation, disinformation and malinformation (defective, deceptive and damaging).

What you need for such activity:

• 1–3 'fake news' or clickbait articles

What does it teach:

- media criticism and analytical reading skills
- social media skills and due caution

3. Fact-checking as a multidisciplinary learning module: an example concerning the upcoming EU elections

Using fact-checking as a multidisciplinary learning module in an electoral context can prove to be an interesting and motivating approach for schools. This kind of a module suits comprehensive education extremely well, especially when primary and secondary schools work together. The model below is ideal for the grades 8–9 but it is easy to include lower grades in the process: the older pupils can teach the younger ones media criticism and fact-checking, primary school pupils can go and view an electoral debate and the schools can invite reporters to come and tell about their work.

This model, based on the HRSK's practical experience, strives to bring different subjects together, such as history and social studies, mother tongue, first foreign language and visual arts.

The chief requirements for putting a multidisciplinary learning module into practice are the co-ordination between the different teachers and effective teaching schedules. A model of this kind serves numerous pedagogical goals, for instance:

a) Information goals:

- To teach how the political system and democracy work.
- To shed light on National political parties.
- To teach about the role and prerogatives of the EU and the Parliament.
- To show what political campaigning is like in practice.

b) Skill goals

- To use analytical and critical thinking in practice.
- To teach independent data searching, media source evaluation and fact-checking skills.
- To teach planning skills (e.g. through campaigning).
- To teach argumentation and debating skills.

c) Experience goals

- To establish a sense of participation and belonging in democracy.
- To demonstrate different ways of personal involvement.
- To enhance the pupil's identity as an intelligent and critical individual who is capable of independent thinking.

Project description and activities:

The project coincides with the run-up to the 2019 EU elections and utilises this for pedagogical purposes. The first phase consists of a mock panel discussion and a vote, after which the learnt information will be put to practice by inviting actual candidates to the school and challenging them with a similar discussion. The project can be further improved by, e.g. inviting guest reporters, visiting editing offices and staging a mock election at the end of the project. Other activities can easily be included in the project, such that are congruent with the topic and tie other subjects together, like staging a Nativity play or organising similar thematic activity.

We also warmly recommend you to invite FactBar trainers or fact-checkers to your schools to give fact-checking training to your pupils – the best results are reached when the fact-checking is taught by a qualified expert. Faktabaari fact-checking training is fun, interesting and informative, and it offers a comprehensive and easy way for the pupils to learn new things. The training is designed to support the goals set in the National curricula, and it has been prepared carefully for children and adolescents from the pedagogical point of view.

The first phase:

1) The pupils delve into the party programmes

The pupils are guided to find out what different parties are about and what their party programmes, values and candidates are. Each pupil group is given the task to analyse the communication of a single party. The goal is to get a fully-formed idea of what the party claims, promises and represents.

The pupils can also be guided to interview different candidates. It is recommended to encourage pupils to make use of as many sources as possible when studying what the parties support, claim and represent, what kind of rhetoric and communication do they employ and what are the candidates of a party typically like. The pupils can make a presentation about the party. It is possible at this point to do simple fact-checking about the claims made by the party or its candidates.

What you need for this activity:

- links to the party programmes and candidate lists
- other sources for studying and advanced research

2) The pupils create their own candidate

In this activity, the group chooses one pupil to represent a fictional candidate for the party being studied. They come up with a name, background and set of values for the candidate based on the stereotypes they can form of that particular party – the aim is to create as typical a candidate as possible.

What you need for this activity:

teachers' support during the creation process

3) Electoral campaigning

Next, an electoral campaign is prepared for the fictional candidate, based on the examples the pupils have encountered during the studying process. The campaign can included, for instance, posters, websites or electoral videos (cf. the (electoral) posters above). The idea is to imitate an actual campaigning process as faithfully as possible and to study how campaigns attempt to influence people and what kind of promises are usually given in elections.

What you need for this activity:

- material and equipment for campaigning
- instructions on how to make the campaigning material

4) Electoral debate and real-time fact-checking

By way of wrapping up the first phase, the classroom will hold an electoral panel discussion in which the candidates present themselves and debate with each other. The interviewers and the audience can also put questions to them. Three other voluntary groups are needed besides the 'candidates': the interviewers who host the discussion, the selected fact-checkers from each pupil group and the audience, who watches the debate and tries to come up with additional questions.

The selected pupils will be trained for the roles in advance in order for everything to go smoothly. The 'candidates' could, for example, get ready for the debate by carefully studying the main arguments and claims of their respective parties in particular issues and learning how to prepare for a public performance. The interviewers should be trained how to conduct an interview, how to ask good questions and how to give each interviewee the same amount of time to speak. The pupils who will be in the audience can prepare by coming up with challenging questions for the 'candidates'.

A fact-checker will be selected from each group and these selected pupils will form a fact-checking group. This group will do real-time fact-checking about the claims made in the debate and, depending on the resources, the results can be shown by using a projector, for example. Ideally, the whole class should be given fact-checking training, but it is especially important to give comprehensive training to the fact-checking group.

The fact-checkers do as follows: a) they examine, recognise and collect fact-based claims made in the discussion and, b) using computers or smart phones, they attempt to prove the truthfulness of the claims as quickly as possibly by means of, for example, the Faktabaari traffic light scale and the ddd vocabulary (defective, deceptive, damaging). All recognised and/or checked claims can be discussed at the end of the panel discussion and see what is the grand total of facts. It would be well to make it clear to the pupils that all facts cannot and need not be checked – it is important to weigh the relevance and significance of the claim.

As a finishing touch for the discussion, the classes can hold an informal vote and discuss which 'candidate' had the best arguments and why. Here it should be discussed how confidence, self-assurance and good rhetoric can compensate the defects of an argument. Lastly, making a summary of the fact-checking results is recommended.

What you need for this activity:

- the time and premises for the debate
- the equipment for the fact-checking (e.g. computers with Internet connection)
- coloured cards or similar items for the final vote in order to quickly see which candidate was the best debater

The second phase:

1) Inviting the candidates, making questions and preparing in general

The second phase of the project seeks to put the classroom setting into a larger, social context and to give pupils an actual experience of social participation. Real-life contact with the actual candidates and decision-makers makes the participation more tangible – something a single course book could never do.

It has been seen that electoral candidates, especially the younger ones, are usually well disposed towards school visits. But since the candidates are most likely to be really busy in trying to balance campaigning and their work, the first task for the teacher should be to make sure the panel discussion is properly scheduled and that the parties (or the candidates) will receive their invitations well in advance.

Just like during the previous mock debate, it is advisable for the teachers to remind the pupils what the different roles entail: the interviewers should practise their questions with the teacher, the factcheckers could rehearse the fact-checking process under the teacher's supervision and the audience could go through what kind of questions to make.

What you need for this activity:

- the parties' or candidates' contact information
- possibly some supportive learning material

2) The electoral panel discussion and real-time fact-checking

It is important to maintain a positive atmosphere during the discussion. If the candidates aren't experienced in such presentations, they might get performance anxiety. Hence it is essential that each candidate gets to speak for a fixed amount of time, that there will be no interruptions or talking out of turn and that, despite critical comments and lack of consensus, the discussion will be remain civil.

There are different ways to include the questions from the audience in the debate – they are either asked 1) at the end, leaving less room for discussion or 2) before moving on from one main question to the next, so that the question can be more accurate and relevant. The latter activates the audience better because the question under discussion and the answers thereof are still fresh in their minds. It also gives the fact-checker more time to do their duty.

Just like during the mock debate, the fact-checkers collect fact-based claims and try to check them in real time to the best of their abilities. There are two ways of breaking down the grand total of facts, depending on whether the candidates have been informed of the fact-checking or no. If the candidates are aware of the fact-checking, the facts can be gone through in their presence and they're given the chance to comment on their claims. If the candidates have not been told of the fact-checking, it would be decent to go through the facts only after the candidates have left.

Once again, an informal vote can be held after the debate to see who was the most convincing speaker or who had the best arguments according to the pupils.

What you need for this activity:

- the time and premises for the debate
- the equipment for the fact-checking (e.g. computers with internet connection)
- coloured cards or similar items for the final vote in order to quickly see which candidate was the best debater

3) Mock elections and breaking down the results of the real elections

The school can easily stage their own mock elections in the run-up to the actual ones.

It would be interesting to discuss in class how the results of the actual elections coincide with those of the mock elections. This method is made even more effective by giving pupils the chance to follow the results of the candidates who visited their school. After the results have been given, it would be recommended to discuss, for instance, what kind of factors affected them and how different people have had different information at their disposal when figuring out whom to vote. Further: How does the voter's locality, age, educational background and values affect their decision? The class could also discuss 'the consumer protection of a voter' and how responsible the voter is to keep track of the way the elected candidates perform in reality.

It is also a good idea to go through what the ramifications are of not voting: you give up your vote to the actual voters (e.g. seniors). Whenever someone opts out of voting, the given votes increase in importance. The significance of voting for 'joke candidates' should also be brought up: how the act of voting for a deliberately bad, foolish or incompetent candidate can backfire (and how a vote is always both for the candidate and their party). Pupils should know that even though they can and should voice their possible dissatisfaction towards politics, it is not recommended to do so by horsing around in the voting booth.

What you need for this activity:

- the wherewithal for the vote: ballots, forms and a voting booth
- means to calculate the votes and making a report



Useful websites in view of FactBar EDU co-operation

EAVI: https://eavi.eu/beyond-fake-news-10-types-misleading-info/

Faktabaari EDU: https://faktabaari.fi/edu/

InVID - video / photo tools https://www.invid-project.eu

Savoir Devenir http://savoirdevenir.net/formation/

Evens Foundation – Media http://evensfoundation.be/programs/media/

Media Liferacy School, Finland https://www.mediataitokoulu.fi/index.php?lang=fi

Unesco MIL

https://en.unesco.org/themes/media-and-information-literacy

European Commission, medialiteracy and disinfomation

https://ec.europa.eu/digital-single-market/en/news/communication-tackling-online-disinformation-european-approach - Statement of Savoir Devenir, Faktabaari and Lie Detectors on the communication https://t.co/4amqpXFAlt

European Council and Information Disorder report:

https://www.coe.int/en/web/freedom-expression/information-disorder

Lie Detectors

https://lie-detectors.org

FactCheckIt – role playing card game https://factcheckingday.com/lesson-plan

International Fact-Checking Network (IFCN) code of principles:

https://ifcncodeofprinciples.poynter.org

Contact / propose new FactBar #EDU lesson plan

desk@factbar.fi

Joint site for all Faktabaari #EDU (in Finnish) and FactBar #EDU support material including this document https://www.faktabaari.fi/edu

Twitter: @FactBar Facebook: facebook.com/factbar







