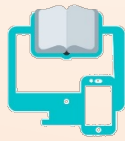




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Boosting Contemporary Teaching Methods for Europe



## **ERASMUS PLUS PROGRAMME**

**KA2 – Cooperation and Innovation for Good Practices  
Strategic Partnerships for Vocational Education and Training**

**PROJECT NUMBER - 2020-1-DE02-KA204-007399**

**“Boosting Contemporary Teaching Methods for Europe”  
BoConTeam4EU**

**C2 Critical thinking and Information Filtering  
- Decision Making in Education -**





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## The concept knowledge

Knowledge is today usually used to compete in today's working life. It has become a fashionable concept and is used without a purpose.

Both Plato and Aristotle used knowledge as a concept and Plato foremost acknowledged the theoretical aspect of knowledge and called it episteme.

The practical aspect of knowledge was by Aristotle called techne. Today there are several concepts that describe the practical and theoretical aspect of knowledge

## Forms of knowledge

Knowledge can be divided into different forms.

The OECD describes four different categories (2003); knowledge, cognitive skills, practical skills and a category that contains attitudes, feelings, values, ethics and motivation.

The Bologna model for higher education is based on six forms of knowledge grouped into three departments: knowledge and understanding, skill and ability as well as judgment and attitude.

Although the divisions differ, it is possible to distinguish a pattern.

Skills are distinguished from knowledge and can be both cognitive and practical. Sometimes the term ability is also applied to skills.

The third main category includes more ideological and emotional aspects in the formation of knowledge. Here you will find attitudes, values, attitudes, ethics and feelings.

## Tacit knowledge

Today, people often talk about explicit knowledge and tacit knowledge. Tacit knowledge is difficult to share because we are seldom aware that we have this knowledge.





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## Explicit Knowledge:

- Data, Information
- Documents
- Records
- Files

## Tacit Knowledge:

- Experience
- Thinking
- Competence
- Commitment
- Deed

The "Iceberg" metaphor describes the  
relationship between Explicit & Tacit Knowledge

### Tacit knowledge:

Hard to explain without showing

Obtained through practice and experience

Unaware of what you can do!

Everything that a person knows minus what can be expressed in speech and writing

Acquired through action, execution, reflection

### Explicit knowledge transfer

- Manuals
- Literature
- Document
- Instructions
- Seminars and conferences
- Fact sheet
- Formal education
-



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## Tacit knowledge transfer

- Mentorship
- Coaching
- Apprenticeship
- Observation
- Focus groups
- Informal contexts
- Social networks
- Brainstorming meetings



<https://www.youtube.com/watch?v=kXhJ3hHK9hQ&t=1s>

Modern skepticism often maintains that knowledge does not require security.

Philosophical skepticism lands in the conclusion that you can most likely not know anything - including that you cannot know anything about knowing anything.

## Summary of more than 2000 years of theory of knowledge

Do we know anything?  
Probably.

Can we prove that we know anything?  
No, not if the term "know" implies to own "absolute knowledge "  
(But this does not imply that we do not know anything).



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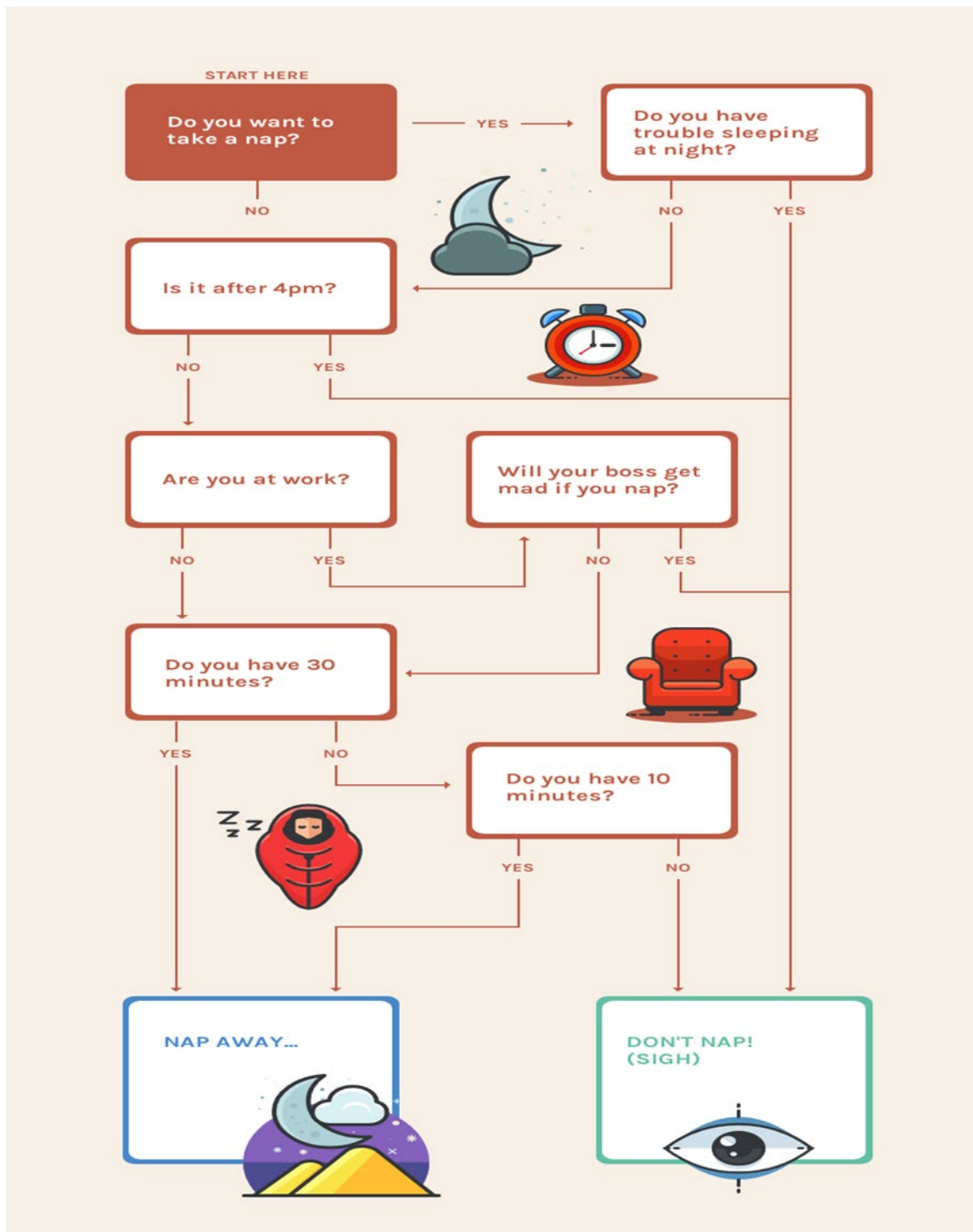
Can we live with that we cannot prove that that we know anything?

Obviously

**What is a decision tree?**

A decision tree is a specific type of flow chart used to visualize the decision-making process by mapping out different courses of action, as well as their potential outcomes.





## Decision trees are flexible

Decision trees are non-linear, which means there's a lot more flexibility to explore, plan and predict several possible outcomes to your decisions, regardless of when they actually occur.

For example, if you're an HR professional, you can choose decision trees to help employees determine their ideal growth path based on skills, interests and traits, rather than timeline.



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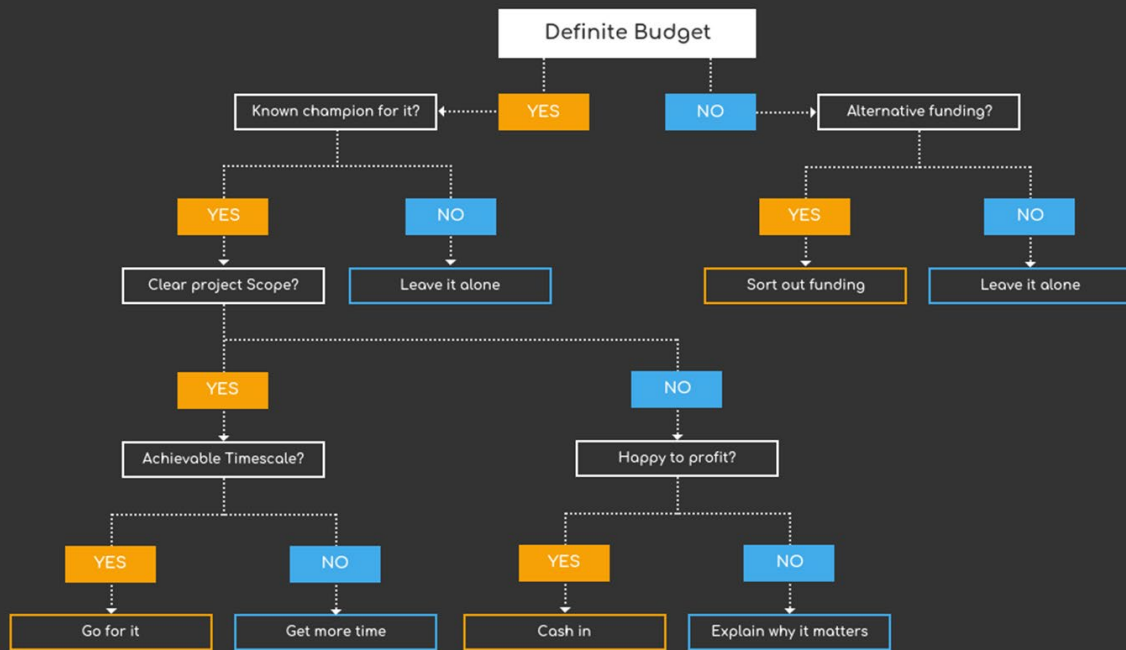


You can also help assess whether or not a particular team member is ready to manage other people. Use this decision tree example for HR inspiration.





# Project Development



[StatQuest: Decision Trees - YouTube](#)

## Decision Trees...



**...clearly explained!**



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## There are three different types of decisions

1. The rational person, who thinks up a decision, lists facts in Excel sheet and is good at detecting the risks.
2. The emotional decision-making personality that focuses on how the decision affects in relation to others, to the group.
3. The instinctive, who feels in the body whether it is right or wrong, goes on gut feeling and makes decisions quickly.

## Which type of decision-maker are you?

Think of three important decisions you made. What made you feel satisfied with the decision?

Was it that...

...you had all the facts. (Rational)

...all felt pleased with your decision. (Emotional)

...it just felt right. (Instinctive)

**Results.** Ask yourself what the purpose of the decision is, what is to be achieved, for example before a reorganization.

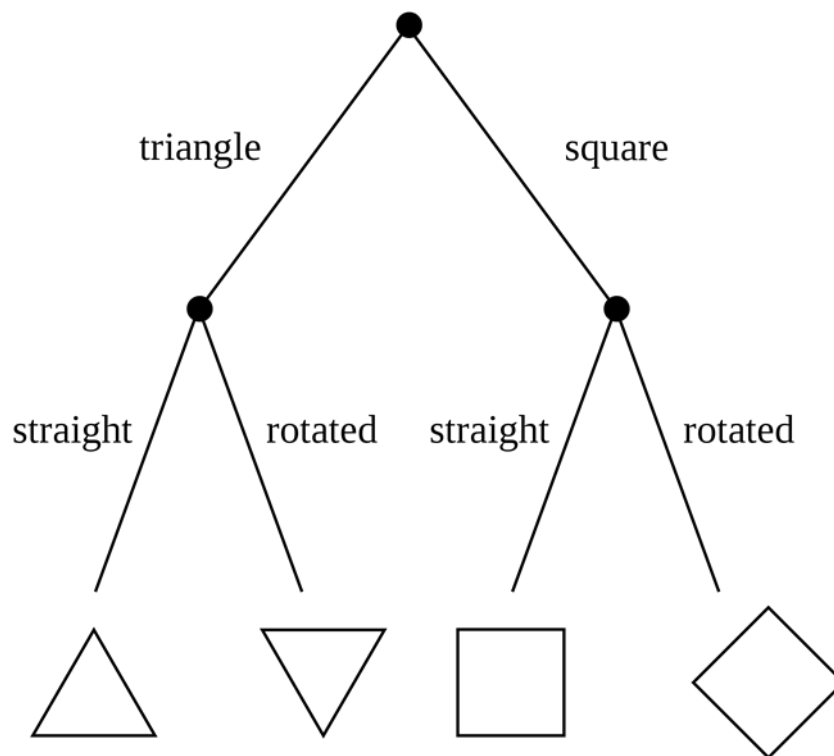
- Basis. Depending on the purpose, you get a basis for how to achieve the purpose best.
- Two types of decisions. Be aware that there are two ways to make decisions: rational and emotional. What decision types are we and what do we have to watch out for?
- Question. If we were to know in a year's that the decision, we now believe is right turns out to be wrong; what was it then that went so wrong?
- Presence. Make sure that the decision is not made under external pressure (when we are stressed, it is difficult to be present and act wisely). Take a break, walk or sleep on the thing and the decision lands better.

## Investigative working methods usually include the following parts:

- Problem formulation.
- Hypothesis position.
- Planning of experiments and investigations.
- Implementation of measurements, observations and other data collection.
- Data analysis and presentation of results.
- Discussion of the hypothesis outcome and the reliability of the study.
- Communication of the survey results and procedures in oral and written form.



<https://corporatefinanceinstitute.com/resources/knowledge/other/decision-tree/>



### 3 simple exercises to increase your critical thinking

Do you have all the facts on the table before an important decision is made? Follow these three simple exercises to become better at taking in more opinions, perspectives and become better at critical thinking.

As a manager, it is easy to get caught up in convincing arguments or make decisions based on old truths, which can lead to wrong decisions. You can avoid this if you work with your critical thinking.

#### 1) Question old truths

If you are about to formulate a long-term business strategy, which in many ways will shape your coming years and what investments to make, it is easy to forget some basic questions. With these you



can learn to question old truths.

Examples of these questions are: How do I know the market will grow? What does the research say about our expectations? Have I tried walking in my customers' shoes to get their perspective?

You can also grow into the assumption that things will change (which will happen): What do we do if our customer group changes? What do we do if our main supplier goes bankrupt?

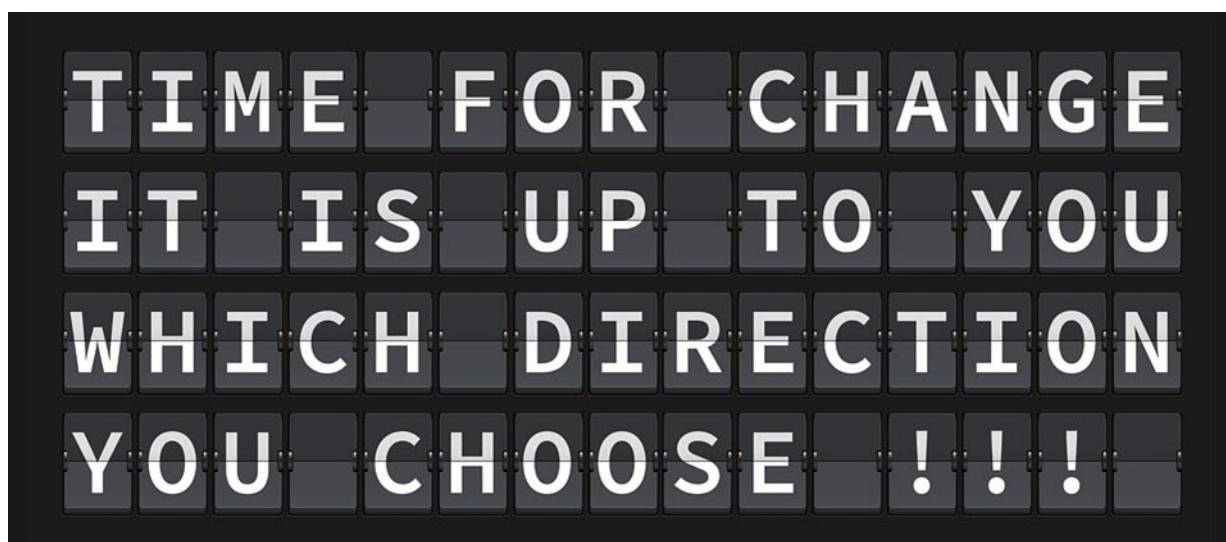
## 2) Question the logic of reasoning

Sometimes it's easy to get carried away by an argument that sounds good. But what is really hidden behind the words? Ask yourself: "Is it possible to back up the claim?". And above all: "Does all the evidence together give a logical conclusion?".

An example is if the salespeople make better results in the spring - is it because the customers have more money at the beginning of the year or because the boss gave an inspiring speech at the Christmas party?

## 3) Strive for a diversity of opinions

No organization feels good about a single opinion being put forward. At the same time, it can be very nice to feel the same way because it also means a conflict-free work environment. But the better you know each other in the workplace - the lower the risk of conflicts just because you think differently. In order to have a greater flora of opinions and critical thinking among your employees as a manager, you must leave your job-related filter bubble. Practice trying to have lunch with colleagues from other departments and in various ages. This will in the long run give you more perspectives and opinions, which will help you think critically and make better decisions as a manager





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## Presentation about filtering information

### Decision Making



#### **Collect data / information:**

This is the process of collecting the data / information.

#### **Develop solutions:**

Develop at least two reasonable solutions. Feel free to use decision trees to illustrate the different options.

#### **Basis for decision:**

Try not to just present the different options and developed recommendations based on text documents and charts. Do not forget that in the decision situation there must be a developed implementation plan.



Some examples of pitfalls in decision making are:

- that only confirmatory information is sought, the person or group has already decided,
- that a disproportionate focus is placed on what is known and what one is comfortable with,
- that recent major incidents or possible accidents greatly affect the decision,
- lack of information or
- that analysis of implementation is lacking in the decision-making situation.

Decision making requires critical thinking and filtering of information

Source criticism and critical thinking are themes that are connected and overlap.

Both are about practicing an analytical and systematic way of interpreting and absorbing information.

Need and significance of knowledge in critical thinking and source criticism  
can be compiled to three different categories.

Quantity, quality and time related to the information the participants are exposed to.

The need for knowledge in source criticism respectively critical thinking has increased.

The increased need for knowledge in turn relates to:

- that today's citizens face an increased amount of information
- that it is increasingly difficult to determine the credibility of various sources
- that the need is now greater than before, and can be assumed to increase

Need and significance of knowledge in critical thinking and source criticism	Quantity: Increasing amount of information
	Quality: More and more uncertain sources
	Time aspect: Increased need now and in the future
	Truth: Separate facts from untruths and values
	Community education: Democracy, socialization, transfer of values
	Perspective: Understand the point of view of others

## Filtering information





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- Check the facts
- Critical thinking
- Check the source
- Are the picture true
- Face news –misleading news



To get right information check facts.

[https://www.youtube.com/watch?v=EZsaA0w\\_0z0](https://www.youtube.com/watch?v=EZsaA0w_0z0)



### Lateral reading

Knowing where information comes from helps us determine its reliability. All information is created by someone and is created with a purpose. Knowing who is behind something can be difficult, especially online.

For the most part, however, we do not need to technically review the source code for a page - we can only read the page's content in a different way.

Usually, we tend to read web pages the same way we read books, we start from the top and read down. We read vertically.

### Lateral reading

For lateral reading, start a new tab next to the one you want to review. You read sideways, laterally, instead of vertically from top to bottom.

What tab should you then open for the tab to start your review?

Maybe news sites? Or sites that collect fact-checking services?

Or maybe a search engine? This of course depends on the type of source you are reviewing, but Wikipedia is often a good site to have as a starting point.



## Who can you trust?

We cannot be experts in everything ourselves, but we must be able to trust the expertise of others in a subject.

Before we decide to trust a source, we must determine if the source is an authority in the area they are commenting on. One should also know what perspectives the source has - in what context do they operate?

To determine this, you need to leave the source and search elsewhere. If you only read the source, you only get the information they want you to have. All sources have their perspectives and biases based on their worldview and political preferences. These perspectives need to be taken into account when using the sources.

An important aspect of the fact-checking process is the ability to determine whether a source of information is credible. Credible sources can also make mistakes and it is important to be able to make corrections if something goes wrong.

Being aware of the angles and perspectives of sources is necessary, as well as having it in the process instead of just dismissing sources because they have bias.

For a statement to be taken seriously, there needs to be evidence to support the statement. There is good and bad evidence, and it is not always easy to know which evidence proves something. There is also the type of evidence that is good, but completely irrelevant to the claim in question.

### Example:

The vaccination issue is a clear example of how access to bad information can lead to bad decisions. Some choose not to vaccinate their children after following the advice on these pages. Failure to vaccinate children can lead to serious illness or even death.

That bad information leads to bad choices is also shown by an American study - the more people watched the Fox program Hannity which downplayed the dangers of the corona, the more people became ill and died in those areas compared to those who primarily had other news sources. Bad information led to bad choices.

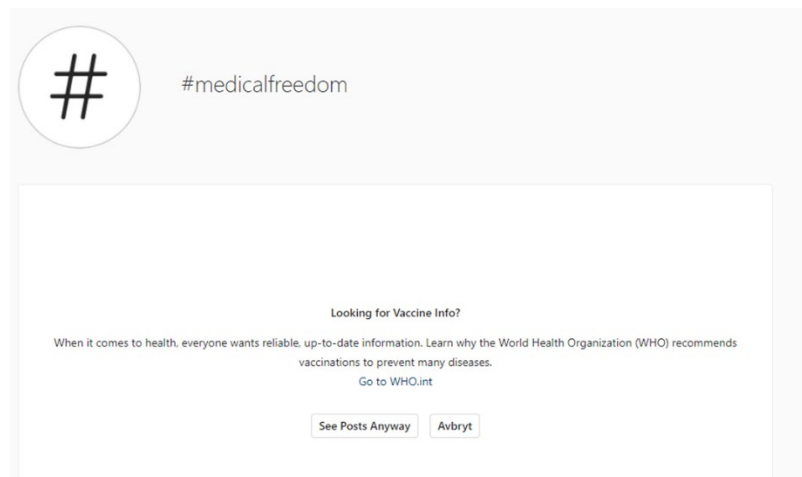
### Example:

Measles is on its way back again at an alarming rate around the world. One of the reasons is that the anti-vaccination movement called anti-wax, has received a big boost and has been good at using the internet as a propaganda channel.

Several social media have drawn attention to the problem and on Instagram the service warns and recommends that you visit the WHO when you search for certain hashtags that the movement has made its own.



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According to a new Yahoo News/YouGov poll, 44 percent of Republicans believe that Bill Gates is plotting to use a mass COVID-19 vaccination campaign as a pretext to implant microchips in billions of people and monitor their movements — a widely debunked conspiracy theory with no basis in fact.



The claim appears to have developed after Gates participated in a March 18 forum on Reddit. There, he answered a question about maintaining businesses during the pandemic.



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*Bill Gates, March 18: Eventually we will have some digital certificates to show who has recovered or been tested recently or when we have a vaccine who has received it.*

### Checklist!

When retrieving information from a source, you should answer the following questions in order to evaluate it.

- Who is behind the source?
- Is it an authority?
- Is it an organization?
- Is it a company?
- Is it a private person?
- Some examples of pitfalls in decision making are:
  - that only confirmatory information is sought, the person or group has already decided,
  - that a disproportionate focus is placed on what is known and what one is comfortable with,
  - that recent major incidents or possible accidents greatly affect the decision,
  - lack of information or
  - that analysis of implementation is lacking in the decision-making situation.

The source-critical method in short, source criticism is about answering a series of questions to form your own opinion about a source's credibility. In that work, you also seek to find the purpose and origin of the sources.

In traditional source criticism, four criteria are applied when a source is reviewed:

- Authenticity. Is the source what it claims to be?
- Is the source an original or a copy?
- Is it genuine or fake?
- Time. Is the information current or can there be newer findings?
- How long after what happened was the source established?
- Sources that are to be trusted closer in time in relation to what they testify about are considered to be more credible.

### Dependent

Is the source independent or does it belong with other sources?

Is the information from the source dependent on other sources?

On which way or ways?

### Tendency

Are there values in the information from the source?

Whose interests represent the source?

Is there conflicting information from other sources?

How credible is the conflicting information?

### Checklist!

#### Evaluate the website



Before using information from a website should you answer the following questions to evaluate it.

- Who is the sender? Is there an information or contact page that tells who or who is standing behind the site?
  - Is there other information about who who is the sender?
  - How do you value the knowledge you get about the sender?
  - How does that affect the content?
  - Some examples of pitfalls in decision making are:
    - that only confirmatory information is sought, the person or group has already decided,
    - that a disproportionate focus is placed on what is known and what one is comfortable with,
    - that recent major incidents or possible accidents greatly affect the decision,
    - lack of information or
    - that analysis of implementation is lacking in the decision-making situation.
  - What is the purpose of the website?
  - Does it want to inform?
  - Present facts? Propagate for an opinion?
  - Sell something? Maintain?
  - Does it have several different purposes?
  - Is site advertised or not? How affected the content of what kind of website it is? Evaluate and take a stand.
  - Who is the target group?
- 
- Is the content complicated or easy to understand?
  - Are the lyrics well written or bad translated? Are the stated facts, correct?
  - It is referred to sources? Is there any date that shows when it was last updated?
  - Do the links work?
  - Can you get the information from other places? Which other websites or webpages link to it site you are researching?



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## What Are Credible Websites? - YouTube



### **Pictures**

Most of the pictures we come across are in one way or another edited. It can be a tasteful filter on the Instagram image for more advanced processing in Photoshop. How can one determine which of all these enormous amounts of images we encounter every day are made to deceive us?

Images are a powerful tool and are therefore often used as proof or income for something. We are used to believing in what we see, to a much greater extent than we are used to believing in what we read.

### **The question is:**

What is the source?

What are the intentions and in what context is the image presented?

This also applies to moving images that can be easily cut and edited to suit a certain message, but they can also only be put in a context where they are said to mean something.

The absolute easiest way is to simply take a film clip and write a caption to it. You have now easily changed the context and message of the film. Picture and film also need to be read laterally.





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## Evaluating Photos and Videos

<https://www.youtube.com/watch?v=p7uvqb8fcdA>



### **Data and infographics**

Everything must be put into context, so must statistics. Statistics can be a powerful tool for understanding the world around them, but since statistics can easily be seen as a neutral visualization of data, it is also a good method for cheating.

Neither data, nor interpretations of data, are neutral. People collect, interpret and present data and there are many sources of error along the way.

We often "believe" initially in data, in the same way that images and film put our source-critical ability on fire.

We always need to ask ourselves: Does the data presented support the statement? Is the data source reliable?

Data visualized in graphs and bars is a thankful way to convey statistics. But for it to be reliable and credible, both the data source and its representation must also be so.

### **Exercise**

Large feet:

All available data shows that people with big feet are smarter than people with small feet. How come?

Conclusion: Adults have bigger feet and a higher IQ than children.



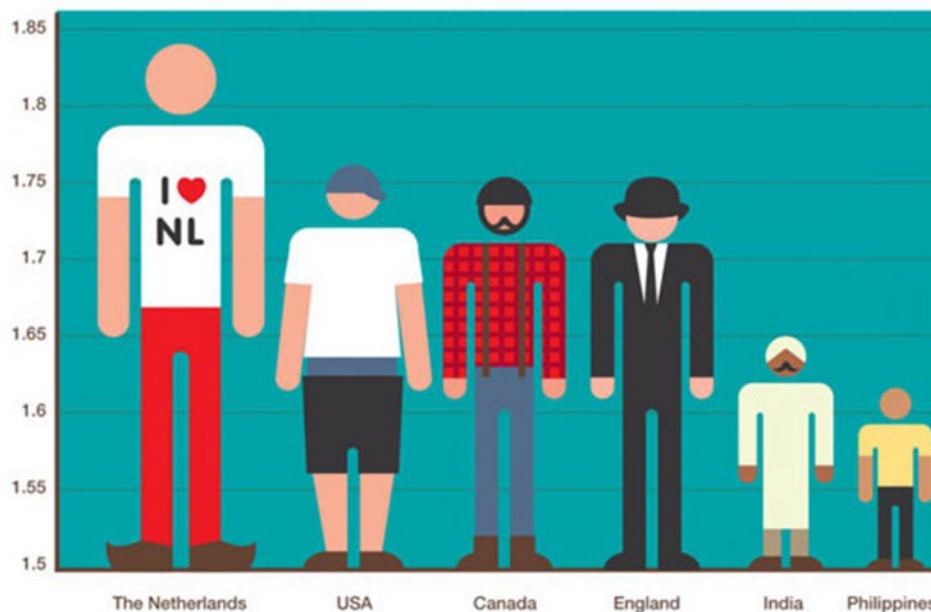
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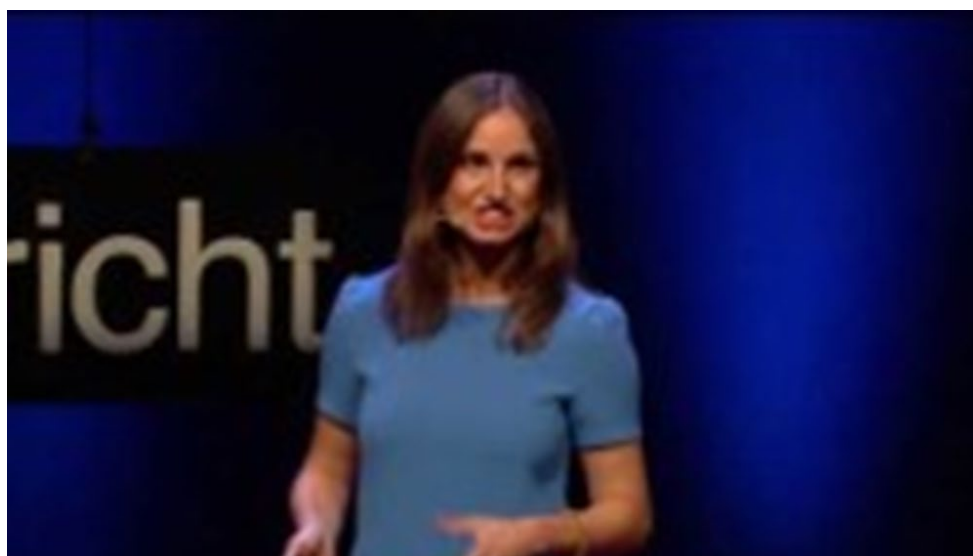
The data on which the graph below is based is probably correct, but there is something about the visualization of the data that makes it perceived as problematic. Can you identify what?

## LOOKING DOWN ON THE REST OF THE WORLD

(Average male height in m)



How to defend yourself against misleading statistics in the news | Sanne Blauw | TEDxMaastricht - YouTube





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# BEYOND 'FAKE NEWS'

## 10 TYPES OF MISLEADING NEWS

Type	Characteristics	Impact	Motivation
<b>propaganda</b>	■ adopted by governments, corporations and non-profits to manage attitudes, values and knowledge ■ appeals to emotions ■ can be beneficial or harmful	medium	politics/power
<b>clickbait</b>	■ eye catching, sensational headlines designed to distract ■ often misleading and content may not reflect headline ■ drives ad revenue	low	money
<b>sponsored content</b>	■ advertising made to look like editorial ■ potential conflict of interest for genuine news organisations ■ consumers might not identify content as advertising if it is not clearly labeled	medium	money
<b>satire and hoax</b>	■ social commentary or humour ■ varies widely in quality and intended meaning may not be apparent ■ can embarrass people who confuse the content as true	low	humour/fun
<b>error</b>	■ established news organisations sometimes make mistakes ■ mistakes can hurt the brand, offend or result in litigation ■ reputable orgs publish apologies	low	passion
<b>partisan</b>	■ ideological and includes interpretation of facts but may claim to be impartial ■ privileges facts that conform to the narrative whilst forgoing others ■ emotional and passionate language	medium	politics/power
<b>conspiracy theory</b>	■ tries to explain simply complex realities as response to fear or uncertainty ■ not falsifiable and evidence that refutes the conspiracy is regarded as further proof of the conspiracy ■ rejects experts and authority	medium	politics/power
<b>pseudoscience</b>	■ purveyors of greenwashing, miracle cures, anti-vaccination and climate change denial ■ misrepresents real scientific studies with exaggerated or false claims ■ often contradicts experts	medium	money
<b>misinformation</b>	■ includes a mix of factual, false or partly-false content ■ intention can be to inform but author may not be aware the content is false ■ false attributions, doctored content and misleading headlines	medium	money
<b>bogus</b>	■ entirely fabricated content spread intentionally to disinform ■ guerrilla marketing tactics: bots, comments and counterfeit branding ■ motivated by ad revenue, political influence or both	high	money

**DIG DEEPER...**

<b>false attribution</b>	■ authentic images, video or quotes are attributed to the wrong events or person	<b>misleading</b>	■ content does not represent what the headline and captions suggest
<b>counterfeit</b>	■ websites and Twitter accounts that pose as a well-known brand or person	<b>doctored content</b>	■ content, such as statistics, graphs, photos and video have been modified or doctored

N.B. The impact and motivation assignments are not definitive and should just be used as a guide for discussion

**eavi**  
MEDIA LITERACY  
for CITIZENSHIP  
www.eavi.eu

## Fake news exposed: can you tell what's real? - YouTube



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## What is critical thinking?

The ability to think critically is fundamental for active participation in a democratic society. It includes skills to be able to analyze, reflect, draw conclusions, evaluate and question.



What does it mean to think critically? A definition of thinking critically is "to be able to independently analyze, reflect, draw conclusions, evaluate, question and be creative" (taken from Uppsala University's pedagogical program).

The National Council for Excellence in Critical Thinking has a slightly longer definition:

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.

Robert H. Ennis at the University of Illinois provides the following definition, which can be seen as a more detailed checklist and can provide space for slightly different interpretations (and which can therefore in itself constitute an example of critical thinking).





## A critical thinker

- is open-minded and mindful of alternatives
- tries to be well-informed
- judges well the credibility of sources
- identifies conclusions, reasons, and assumptions
- judges well the quality of an argument, including the acceptability of its reasons, assumptions, and evidence
- can well develop and defend a reasonable position
- asks appropriate clarifying questions
- formulates plausible hypotheses; plans experiments well
- defines terms in a way appropriate for the context
- draws conclusions when warranted, but with caution
- integrates all items in this list when deciding what to believe or do

## What is Critical Thinking? - YouTube



## What is Critical Thinking? - YouTube



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### Critical Thinking Exercise: Facts or Opinion

- Do you think you know the difference between fact and opinion? It is not always easy to know.
  - Do you believe everything you read when you visit websites? The large amount of information available makes it more important than ever to develop critical thinking skills.
  - For this exercise, read each statement and try to determine if it sounds like a fact or an opinion.
- 
- My mother is the best mother on earth.
  - My dad is taller than your dad.
  - My phone number is hard to remember.
  - The deepest part of the ocean is 35,813 feet deep.
  - Dogs is better pets than turtles.
  - Smoking is bad for your health.
  - Eighty-five percent of all cases of lung cancer in the United States are caused by smoking.
  - If you flatten and stretch a Slinky toy, it will be 87 meters long.
  - Slinky toys are fun.
  - One in a hundred American citizens is color blind.
  - Two out of ten American citizens are bored.

You will probably find some of the statements easy to judge but other statements are difficult. If you can effectively discuss the truth in a statement with your partner, it's probably an opinion.





- According to a circulating statement, is that three rowanberries are enough to cover the entire daily requirement of vitamin C - but that is untrue.
  - Rowan berries contain vitamin C - that's right. A lot, actually; twice as much as orange, for example.
  - No, three rowanberries are not enough to cover the daily requirement of vitamin C.
  - Examining such a statement is trivial: We compare the content of vitamin C in rowanberries with the daily requirement.
- 
- Rowan berries contain about 60 mg of vitamin C per 100 g. (Source Fineli: Rowan berries, Institute for Health and Welfare, Finland)
  - The daily requirement for an adult is about 75 mg of vitamin C per day (Source Livsmedelsverket: vitamin C)
  - Thus, 125 grams of rowanberries would be required to cover the daily requirement of vitamin C. Or just over 300 rowanberries, if they cut to 0.4 grams.
  - Maybe it's due to a simple calculation error where 300 berries become 3?



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## Infodemic: Coronavirus and the fake news pandemic - YouTube



Fake picture from September 11<sup>th</sup>





- What Peter Guzli was completely unaware of when he performed his little trick was that he started a snowball that would soon make him world famous under the name "The Tourist Guy".
- Guzli found his photos from the US trip. And when he saw a picture of himself posing on the observation deck of the south tower, a small idea was born. It was meant to be an inoffensive joke for the closest friends.
- It was not long after the terrorist attacks before mailboxes around the world were filled with a shocking picture from the fateful morning. A poor tourist had apparently climbed to the top of one of the towers and snapped a picture, just seconds before the first plane hit the building.
- According to the text that accompanied the image, the camera had miraculously been saved from the ruins when the dust settled. However, the man in the picture could not be identified. Instead, he was referred to as "The Tourist Guy".

**The authenticity is questioned - a number of proofs that the photo was fake were presented:**

- It was over 20 degrees hot when the attack took place. Why does the tourist have a jacket and hat?
- The plane is an American Airlines plane. But the plane that crashed in the south tower was from United Airlines.
- Which camera actually survives when a 417-meter-high tower collapses?
- The plane in the picture is a Boeing 757, but both planes that hit the towers were 767s.
- Why is the plane coming at high speed not blurred? What shutter speed is this really about?
- How could the tourist be there at 9.00 when the observation deck does not open until 9.30?
- It soon became clear that the photo was a manipulation. but the image continued to be famous and was used as some kind of cult symbol by photo shoppers around the world.

**A freelance photographer at Reuters came up with a brilliant idea.**

Why not make the conflict between Israel and Lebanon 2006 even more exciting with a little smoke? Said and done - the photographer cloned. And cloned. And cloned. When Reuters discovered what had happened, they released the original the same day.





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At Time Magazine, they decided to make the cover image a little more suitable to the story. The Time version of OJ undeniably looks much more villainous



The manipulated images from the Iraq war



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## How to reveal fake pictures online

Trace the history of the image


Images contain much more information than what we see - lots of so-called metadata are included.

The easiest way to track where an image has previously been housed online is to use Google reverse image search:



**Sök med bild** ×

Sök på Google med en bild i stället för text. Testa att dra en bild hit.

**Klistra in bildens webbadress**  **Ladda upp en bild**

**Sök med bild**

Then you get both a list of where the image has been published before (if it has been published before, that is), and suggestions for similar images that may be the same.

It is not a waterproof method. But if you get hits where the picture was published earlier in some other context - and where it is alleged to show something else - then you know that it is about fake.

Other similar services are [tineye.com](http://tineye.com) and [regex.info](http://regex.info)





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## Assess the credibility of the source

Take a look at the Twitter or Facebook profile that originally spread the image. Does it seem like a real person? How long has the account been around? How many followers does the account have? What has the person posted before?

If the account is newly created or just seems to be followed by spam bots, it is a given warning signal, as well as if it has a habit of sending out obviously fake pictures. Of course, this does not mean, conversely, that a credible account is a guarantee that the image is true.

## Review the details

Apart from the fact that images are alleged to show something other than what they actually do, they can of course have been manipulated.

Is any shadows strange?

Cloning is a popular tool for manipulating images but is often used clumsily. Look for details that recur several times in the same image. If the patterns in the waves, clouds or paving stones look exactly the same in several places, they have probably been cloned to hide something else.

## X-ray the image

There are also several web services to check if image has been tampered with. No one is perfect, but they can give an indication.

On the free site [fotoforensics.com](http://fotoforensics.com), you can upload an image or paste a web address into an image and get a kind of X-ray image that indicates if the image has been photoshopped.

## Don't be so foolish

Think before you press the share button and send it to your Facebook friends: Can the picture really be real?

If the photo, or what it is supposed to represent, seems too good to be true, it probably is.

JpegSnoop is a smart little free tool for Windows that snoops on whether the image is original or has been modified.

The program succeeds with this trick by first analyzing the hidden information of the jpeg image, where you find out when the image was taken, what camera was used, type of lens and so on. The program then compares the patterns that occur when images are compressed - and can thus list if the image has changed with an image editing program.

JpegSnoop provides a fair amount of information about the image, but if you are not particularly interested in details, just scroll down to the end of the report where the program tells you how likely it is that the image has been modified.



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## 5 tips to improve your critical thinking - Samantha Agoos - YouTube



**Some funny photos that failed with the editing**



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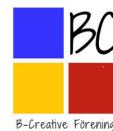




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## #14. “The Mirror Always Seems To Expose These People”





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## #22. “So Hot, The Car Melted”







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## Body Evolution - Model Before and After - YouTube





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