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Promoting ACTIVE and Responsible Citizenship in Schools



Toolkit

II. Activity book for teachers

Activity 1 Fact-checking

First orientation and how to approach information on the internet



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Toolkit and activities for teachers

The Activity is part of the Toolkit which is composed of following three main parts:

- I. Methodology for teachers
- II. Activity book for teachers
- III. Working materials for activities&students

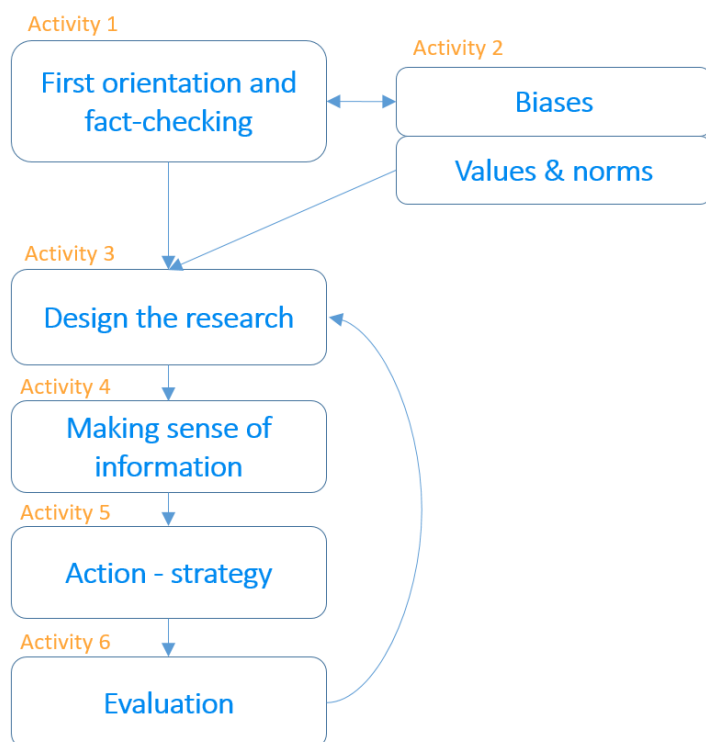
I. Methodology for teachers (*this document*) consists of explanation the principles and terms and concepts to be used when implementing the Toolkit. The goal of the methodology is to provide background and set the common ground and understanding for teachers so they are ready to take the Toolkit in to the classroom.

II. Activity book for teachers is a set of working activities (step by step scenarios) that the teachers can take in to the classroom. The activities correspond with the topics of the Methodology so teachers can easily find appropriate activity for the topic covered in the methodology. There at least one activity for a topic covered in the Methodology.

III. Working materials for activities&students provide materials to be used with students during the activities. Materials consists mainly of templates that teacher can hand over to students to better structure the activity.

Before you start with the Activity **get familiar with the relevant parts of the Methodology** for teachers and the overall composition and logic of the activities presented in the Activity book for teachers to have the overall idea what topics are covered in the activities.

Logic of the activities in the ACTIVE Toolkit





ACTIVITY 1: Fact-checking – first orientation and how to approach information on the internet

The Activity has direct connection to the topics covered in the MODULE 0 & 1 of the Methodology

Students will learn about baits and traps of the information presented on the internet (fake-news and disinformation) and learn how to overcome them by fact-checking and lateral reading.

As this is just the first step we will concentrate mainly on the credibility of the source of information as information is always influenced by its author, so analyzing a source of information (its author and/or sponsoring organization) should be the first step when approaching information on the internet.

Students learn why the source of information is important and learn what criteria they should (not) use when assessing credibility and trustworthiness of information they find on the internet.

Let's help students not to be manipulated and be able to make informed decisions ("not to get fooled" by evidently non-credible data sources).

The Activity consists of the following steps:

Step I: Topic selection

Step II: First impression

Step III: Select the sources of information

Step IV: Assessing the reliability of information (fact-checking)

Step V: Finding the main aspects of reliable information

Step VI: Summarizing the criteria for reliable source of information

Step VII: (optional) Show example/conduct proper fact-checking (second round)

Step VIII: What else needs to be considered?

Expected outputs and outcomes of the activity

NOTE:

- This activity can be done as separate training for students to learn about the reliability of information on the internet.
- As a teacher you can use this activity even for one "interesting/important/influential" disinformation you find that would be examined with students.

Overall goal of the activity:

Finding relevant and reliable source and information on the internet to orient yourself in the issue concerned.

Understand the relevance of the data and information for our objective (to better understand and be able to make informed decisions).

The Problem: People (students) are not familiar how to critically approach the information on the internet and are not able to distinguish reliable source and data over disinformation or biased information provided. Or even distinguish between opinions, facts and advertisement (PR).



Assignment overview:

- Students will look up information about the topic on the internet
- Students examine the relevance and credibility of the information
- Main criteria to look for about the information on the internet will be examined

Expected outputs of the activity:

- ❖ Data, information and sources concerning the issue found on the internet (or from other sources see the materials needed below)
- ❖ Fact-checked information and sources concerning the issue
- ❖ Relevant criteria to judge credibility of information on the internet

Expected outcomes:

- ✚ Students understand baits and traps of the information presented on the internet or from other sources
- ✚ Students understand basics about disinformation and fake-news
- ✚ Students understand how to responsibly approach information on the internet
- ✚ Students learn about fact-checking and lateral reading
- ✚ Students learn to assess credibility of information by relevant criteria (and not to use irrelevant criteria to judge credibility of the source)
- ✚ Students learn about reliability and credibility of data
- ✚ Students can distinguish between facts and opinion
- ✚ Students can identify obviously not credible information or source of information
- ✚ Students understand that every information might matter, even the not credible one (or one that cannot be proven)

Main principles from Methodology to be considered:

- ✚ Problem definition, how not to solve wrong problem (Module 0, chapter 1.3)
- ✚ General concepts concerning facts, data, information and objectivity (Module 0)
- ✚ Disinformation, misinformation and fake-news (Module 0)
- ✚ Understand criteria for quality of data and information (Module 1, chapter 1.1)
- ✚ (Module 1, chapter 1.1)
- ✚ Understand potential data and information sources on the internet (Module 1, chapter 1.2)
- ✚ Understand (not) relevant criteria to judge information on the internet (Module 1, chapter 1.3.1)
- ✚ Understand manipulative techniques used to spread disinformation (Module 1, chapter 1.3.2)
- ✚ How to approach information on the internet, fact-checking and lateral reading (Module 1, chapter 1.3.3)

Time needed for the activity:

Depends on the topic and the number of students in the class and whether students will look up the information during the class or before the class as a home work. But generally the activity is designed to be done in one class lesson (45 min).

With small or if dedicated on only one concrete data source it could be done in less time (15-20 min).









For more complicated topics, if you want/need to cover whole activity in one lesson (45 min), it would be recommended to assign the topic in advance (steps I to III) and let students find and assess the sources as preparation for the class (homework) (step IV). In the class you will then discuss about the topic (step V and further).

If the time allows you can also combine Activity 1 with Activity 2 or 3 into one lesson (so to follow the Activity 1 by activity 2 and/or 3 during one class).

Before you start

Before you start you need to pick a relevant theme/topic/issue to be explored.

How to choose the topic (problem definition) and the biases:

-  Beware of the problem definition not to limit the further research (exploration) by the students (see Module 0, chapter 1.3).
-  Be self-critical not to define the topic/problem influenced by your own biases.
-  Be self-critical and open to different views (do not mistake them for fake-news).
-  Do not worry about potentially controversial topics, there is no need to come to definitive conclusions during this activity. "Controversial topic" drive interesting discussion and then designing relevant research.
-  Topics concerning different values, norms and/or biases could be very well further (or before) explored during the Activity 2, which is directly dealing with biases and different perspectives*.
-  (if possible according the purpose of the lesson) Let students be part of the decision what topic to choose and how to define it (do not worry, if they get it wrong, they will find on the way later on and learn from it...).

*This means you can start exploring the issue selected by Activity 2 if the main concern of the issue (topic you are dealing with) are different values, norms and biases. So it is optional depending on the topic concerned whether you start with Activity 1 (focusing on the information on the internet) or start with Activity 2 (focusing on the biases, values, norms and perspectives of different actors).

Materials needed for the activity

You can approach the task in two ways (or combine these):

- a) You let students to explore and find the sources of information by their own.
- b) You will point out selected sources of information about the topic to the students. So the students will start with these selected sources.

To decide what approach to choose might be directed by these criteria:

- i. If you know the topic and/or know about "interesting" (example) sources that can demonstrate some also not reliable sources of information than you can assign the students to look at these sources.
- ii. If there is not enough time to spend in the class for this activity it would be better to pick some sources for the students to save time.
- iii. If students get the assignment of the activity (to find the sources and information) before the lesson as a home work, you can leave space to students to find their own sources. Then you may ask them to send you the sources before the class so you can get more familiar with the sources in advance.



This activity is primarily designed to deal with information on the internet as this is normally the primary sources of the information today. But the same concept can be easily used with any other sources of information. E.g. for topics concerning the class/school/municipality (topic “that is been talked about”) the first information could be information (or gossip) from class mate, local news or local actors. The main topic is the source and reliability of information from any source.

ACTIVITY PLAN

Motivate students:

- That if they want to understand about something or want to persuade (argue) someone about something they should have arguments based on relevant and reliable information
 - That they will be looking for information about the topic instead you giving them the information first hand.
 - By picking up some actually relevant topic or by letting them to pick an issue they want to work on.
- I. **Topic selection.** Select the topic (issue) that will be explored (see the Module 0 for details) yourself or let students choose:
- a. *(discussion)* Let students decide about specific topic(s) they will be working on. The theme of the **topic should be focused**, e.g. to design publicly beneficial action for the school/municipality, to choose some actual urgent societal issue like deforestation of Amazonian forest, war in Ukraine, climate change or some topic in the range of the class like historical event from some specific period etc.
 - For some topics (social activities projects, small topics) it would be better to separate class into groups. When each group could have its own topic/goal/issue or approach to elaborate.
 - Let the students explain why they choose this topic (personal interest, actuality etc. Do not go to details, see step II).
 - b. *(assignment)* OR You choose the topic according the subject of class or some specific issue you would like students to work on. (see above Before you start)
 - i. Briefly explain the topic (do not go to details about possible controversies and different points of views) and go to the next step.
- II. **First impression.** *(short discussion)* First impression about the topic from the students can be obtained by short discussion session after the assignment of the topic.
- a. Ask students:
 - Q: What do you know about this issue XXX?*
 - Q: What do you think about this issue XXX?*
 - Q: What are the main parties (actors) involved in this issue?*
 - i. The purpose is for teachers to get the general understanding how students perceive the topic and what they know about it.
 - b. If you let students pick their own theme, this should be asked when choosing the topic in step I
 - c. Do not go into details (do not let student argue about the issue etc.).
 - i. If controversial topic, tell students that it will be interesting to explore and discuss the issue further.



- d. Write down for yourself the first impression formulated by students to remember:
use [template for teachers 1-1-II First impression](#)

III. [Select the sources of information](#). Tell students that they will be assigned to find information and sources about the issue concerned OR present them with sources you have chosen for the assignment and go to text step (see the Materials needed for the activity above).

If the students will look for the source of information:

- a. *(assignment)* Ask students to find sources of information about the topic they consider to be important (as a quick task in the class or as preparation for the class at home).
- i. It can be web page of some organization / article / factual information as graph, infographic, data / YouTube video (could be very good source of information to discuss about) / post on Facebook etc.
- b. *(discussion)* Let students quickly present the sources and information they have found and let them explain why they think that it is important/relevant.

Q: Why is the source and/or information provided important to better understand the issue?

- i. Let students discuss (with your input) what sources to choose for further analysis
- ii. Help students with the selection considering following criteria:
- Limit the discussion really to be about the importance (do not discuss the reliability yet, If students point out doubts about the trustworthiness, tell them to choose the source to examine it further)
 - Choose up to 2-4 sources (based on the time available for the activity and complexity of the sources)
 - Choose sources/information that will be good examples for assessing the reliability of the source/information (example of some not reliable information with potentially good impression would be good to choose)
 - It is ok if there is not any reliable source of information in the selection
 - If students would argue that the promoted information is not reliable, tell them: ok, so let's take it and explore in in the next step

IV. [Assessing the reliability of information \(fact-checking\)](#). *(assignment)* Let students examine the selected information and to assess the relevance of the information and its reliability (trustworthiness). Provide them with the working material [1-1-IV Source and its relevance and reliability](#) and ask them to fill it in for each source/information.

Q: How much do you trust this as a source of information?

Q: Asses whether the information is relevant and credible and should be taken into account to decide/know better about the issue?

Q: What kind of information is provided: fact or opinion or PR-promotion?

- i. If you provide students with sources to work with do not forget to remind them that they **are free to open and use also other sites on the internet**
- ii. The students can by assigned to do this as preparation for the class as homework



- iii. To limit the time for the work in class tell students to find and assess up to 2-4 information sources. Tell students not to go to every detail concerning the information (like reading long article) but to concentrate about the main aspects of the information and mainly its source
 - iv. The students can work individually, in pairs or in group (3-5 students) (depending on the size of the class).
- V. **Finding the main aspects of reliable information (discussion)** Let students discuss HOW and WHY(!) they have assessed the credibility of the selected information.
 - FACT-CHECKING (credibility of the information/source)**
 - Q: Do you consider this information credible /not credible?*
 - Q: Why do you consider this information credible /not credible (list main aspects you base your judgement on?)*
 - Q: What are the main criteria of credible information?*
 - ... to help find the criteria:
 - Q: What kind of information is it (fact/opinion/PR-promotion)?*
 - Q: Is the information provided based/backed by evidence?*
 - Q: What are the references for the credibility of the source of information (did you checked on other sites)?*
 - THE AUTHOR and THE PERSPECTIVES**
 - Q: Who created it? What motivations do the creators have for presenting the information? How does that affect the reliability of the source?*
 - Q: What is the perspective of the source/author?*
 - Q: What sources is the author using?*
 - Q: Does the author have any particular interests in the outcome?*
 - Q: What are the perspectives of other actors?*
 - Q: (poss.) What are the main contradicting arguments/opinions?*
 - VALIDITY AND COMPLETENESS of the information)**
 - Q: Is the presented fact actually valid - accurate (evidence is provided, we trust the credibility of the method used – the way how the data/facts were obtained)?*
 - Q: What aspects of the issue does the data / information covers (does it tell all we need/should know)?*
 - a. You can summarize the discussion by writing on the board or use the template in the White board for on-line session **1-1-IV Source and its relevance and credibility (template for class)**.
 - b. Remember that the purpose of the task it is not primary about to choose which information is reliable or not but to **learn to assess the information by the relevant criteria**:
 - i. See the **not relevant criteria explained in the Methodology**, How to approach information on the internet, fact-checking and **lateral reading** (Module 1, chapter 1.3.3)
 - ii. **Relevant criteria** should consider the following:
 - HOW, WHERE and BY WHOM the data (proclaimed facts) were produced. Who is behind the information? Who created the article/web page/graph/social media post? What methods and



sources were used to produce the data/information/video? Is it credible source?

- Recognize manipulative techniques used
- Mainly to distinguish between fact and opinion
 - Fact can be fact-checked
 - Opinion can be based on evidence or it could be just proclamation/propagation
- Distinguish:
 - Fake-news = fabricated (lies)
 - Disinformation (misleading information, mainly thought false interpretation or not supported by evidence)
 - Opinion (be aware that opinion does not need to be discarded but we should recognize it as such)

c. **METRIC** We can divide the students approach as follows:

Did students open another tabs/sites to check information about the source?

If data/graphs/scientific article/link provided – did students check the original source?

Did students judge the credibility based on artificial and not relevant criteria?

Did students distinguish between facts/opinions/PR-promotion?

- Best approach:
 - students recognized and distinguished facts (even proclaimed) from opinions and PR propagation
 - mastery would be to see the interpretation of the facts as interpretation and not facts as itself
 - students distinguished facts and opinions and used lateral reading (checked the source by information provided by other sources and checked the sources of evidence provided)
 - students understand different purpose and potential usage of the secondary sources of information
 - students recognized manipulative techniques used
 - students also examined the validity of facts provided (at least discussed this topic as they might not have time to examine it thoroughly)
- Promising approach:
 - students recognized facts from opinions but were not able to identify credibility of the facts provided
 - students recognized that the (possibly) non-reliable site is not reliable but were not able to provide the relevant explanations gained by lateral reading
 - students had doubt because of manipulative techniques were used
 - students guessed some different purpose and potential usage of the secondary sources of information



- Poor approach:
 - students did not recognize facts from opinions and interpretation
 - students were not able to identify the non-reliable site (providing non relevant arguments)
 - manipulative techniques were not recognized
 - students misinterpret different purpose and potential usage of the secondary sources of information
 - ii. Remember that this is mainly about **credibility** of the source. So **only the first step when assessing information** (“not to get fooled” by evidently non-credible data sources). But when we want to understand we need to more than fact-checking.
 - d. **IMPORTANT** If you encounter any **controversial topic** where it could be not possible to judge the credibility of the information on the spot and/or it would be **more demanding** according to the time you have allocated for this activity, do not worry as this is a good entry for the next steps:
 - if you are not able to decide the credibility of the source openly explain that more time and effort (research) is needed
 - as you could not verify the fact by fact-checking
 - to decide reliability of the information we might need to **look for evidence** to support it or dismiss it (as we will do in the next step)
 - explain that to better understand the issue you should (you will be in the next step) and **looking for relevant sources of information** to understand the issue and be able to decide and take closer look at the **perspectives and biases of the actors** involved
 - if **biases and different perspectives** are (strongly) presented in the issue you are dealing with, it is great to continue after this Activity with Activity 2 and explore the biases, values and norms further
- VI. **Summarizing the criteria for reliable source of information:** (*discussion*) summarize with/to the students the main criteria for assessing the credibility (trustworthiness) of the source for information.
- a. Summarize with students:
 - i. wrong assumptions and criteria for judging the credibility of information on the internet
 - what to be aware of (not relevant criteria to judge information on the internet)
 - what to do
 - lateral reading (check the source, check the evidence provided)
 - understand what type of information it is – opinion/fact
 - is evidence provided
 - understand the perspective of the source/author



- ii. the main criteria and approach to assess credibility (mainly point out need for lateral reading – to say that this is what the professional fact-checkers do)
- iii. the main lesson for students is also that **deliberate effort** is needed
 - you have to invest to assess reliability of information
 - that people do not want to invest and just take the information that come to them without any investigation is one of the main reasons why disinformation and fake news are spreading
- b. Remind students that this is just a start “not to get fooled” by evidently non-credible data sources. So we can collect reliable data. But we still **need to consider the completeness and validity** of the information (see full criteria for reliable data described in the Module 2).
 - i. Even credible source (like credible news or even scientific journals) can be wrong (not valid) or incomplete.
 - ii. Be aware to recognize what is the information really about (see also the description of Secondary sources of data and information in the Module 2)
- c. Also remind students that **even that the source is biased** or even found as non-credible (concerning factuality) it still can be important source of information if we need to understand the different perspectives about the issue (as many people might use such information to formulate their opinion or as base for their action)
 - i. we need to understand what is behind the information and not dismiss it as not important
 - ii. **important is not equal to credible** (even not credible information is often useful in the investigation of the issue)

(optional)

- VII. (optional) Show example/conduct proper fact-checking (second round). *(discussion / assignment)* Based on the information students learned conduct fact-checking of the selected (or new) information/source.
- a. Based on the time available: Conduct the fact-checking together as class or assign work to groups.



Wrap-up the activity and discuss what else should be considered

- VIII. Explain to students what else needs to be considered. (*discussion*) Depending on the planned further activities. If you plan to continue with Activity 2 or 3 (see below) explain students what will be the next steps by pointing out importance to see different perspectives of actors involved and to look for relevant information to understand the topic. If you are not planning to continue with further Activities than we recommend to wrap-up the fact-checking activity with discussion about different points of views and data and information needed to truly understand the issue concerned.
- a. Point out to students that fact-checking is crucial to get data from reliable source but if we truly want to understand the issue we also need to:
 - i. Consider different perspectives (different actors). Some already covered during fact-checking. Who is involved? What are their perspectives on the topic? Explore the biases. (covered in the Activity 2)
Q: The perspective: Is the source promoting one of the narrative over other?
Q: What perspectives the students had at the beginning (did they approached the theme with biases)?
 - ii. Think about what data and information do we need to truly understand the issue and where to get such data. (covered in the Activity 3)
Q: Is the information we have fact-checked complete to cover all necessary aspects of the topic?
Q: What aspects of the topic were covered by the information we have examined and which aspects were left behind?
Q: What are other sources saying about the topic?
 - b. Even if you are not continuing with Activities 2 or 3 you still can be inspired by them to conduct above discussion with students.
 - i. You can also combine Activity 1 with Activity 2 or 3 into one lesson (so to follow the Activity 1 by activity 2 and/or 3 during one class).

Following activities in the class to be considered/done

Depending on the topic selected and overall schedule for the activities planned by teacher the Activity 1 should be followed by Activity 2 and/or Activity 3:

- a) Follow by Activity 2 Biases, values and norms – when the selected topic concerns actors with different points of views, values and norm. And also to show students what role biases play in our decision making. After Activity 2 you can continue with Activity 3 Designing own research.
 - List down the perspectives and biases (of the students and sources) you have come across during the Activity 1 and take this into the Activity 2
- b) Follow by Activity 3 Designing own research – when different points of views, values and norm are not a big concern in the topic selected continue with Activity 3 Designing own research.

You can also combine Activity 1 with Activity 2 or 3 into one lesson (so to follow the Activity 1 by activity 2 and/or 3 during one class). See the [Logic of the Activities](#) that are part of the Activity Toolkit at the beginning of the document.