

# Deepfake

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## Keywords

deepfake, disinformation, history manipulation, history falsification, propaganda, security threat, fraud, history reconstruction, Nixon, landing on the Moon

## Introduction for the teacher

This lesson scenario is intended for students aged 14 and above. The subject matter discussed allows for its use in interdisciplinary classes of subjects such as history, culture, native language, media education as well as social sciences.

The material has been divided into three parts: the lesson scenario, a set of source materials and a worksheet with exercises to be done during the class, in a group or individually. Elements of the scenario can be modified to suit the target audience.

## Instructions

The script contains five pieces of source material and a worksheet with exercises referring to some of the sources. They are intended particularly for group work, yet individual learners can perform the tasks on their own too. The suggested lesson structure can be modified, along with the use of the sources and exercises. During the lessons, students would benefit from internet access and being allowed to use telecommunication devices with internet access (smartphones, tablets, etc.). This is necessary because of the educational methods used.

## Operational goals

The student is able to:

- define the term deepfake and give negative and positive examples of its application in various spheres of life,
- recognize methods of manipulating historical facts, i.e. verify information available online on the basis of materials using the deepfake technique,
- analyse source texts and photographs pointing out cause-and-effect links.

## Teaching methods

- teaching with discussion,
- group work,
- brainstorming,
- analysis of source material,
- metaplan,<sup>1</sup>
- independent work with a set of exercises.

### **Teaching aids**

- board/flipcharts, marker pen/chalk,
- large paper sheets/Bristol board sheets,
- a computer with internet access and a projector/multimedia board,
- devices with internet access for students,
- YouTube material.

### **Before the lesson**

Ask the students to read the essay entitled '[Deepfake](#)'.

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<sup>1</sup> One of the activation methods used during class; it involves poster making by the discussion/debate participants. The poster represents a graphic summary of the debate (based on Wikipedia, the free encyclopedia: <https://en.wikipedia.org/wiki/Metaplan> [accessed 14 December 2020]).

## Lesson scenario

### Introduction

1. Write the term 'deepfake' on the board/flipchart. Ask the students what associations they have with the term and write them down. Ask them to discuss which of the notions they have offered best define the phenomenon. Try only to moderate the discussion (reacting when they deviate from the subject matter, etc.), giving the students space to reflect. You will probably agree on four or five ideas this way.
2. Suggest your students watch an excerpt from a film available on YouTube (however, first it is important to check its licence to ensure you can play it during your class and it is appropriate for the age group). One of the documentaries worth recommending is [It's Getting Harder to Spot a Deep Fake Video](#) shown on the Bloomberg Quicktake channel. You can use other documentaries/films, but it is important that it is explained the video file's purpose is to demonstrate possible manipulation.
3. Compare the students' comments with information from the documentary, verifying the terms/notions written down. For this task, it will be helpful to hand out source material and worksheets to the students and to ask them to read Source A.

### Development

Deepfake is a new method of manipulating facts, sources and history. It emerged in the 1990s, yet has become widespread over the last three years thanks to technological progress. Today, it is available to almost anyone with a relatively modern smartphone or a computer with internet access. For some it is good fun, for others a manipulation tool. The goal of this lesson will be to define the possibilities offered by deepfake in falsifying history and the power of its impact in the near future.

1. Introduce the notion of using deepfake in the reworking of historical films. They can be easily found online. I recommend Source D – a trailer of a fake televised address by President Nixon.

2. On the board, write the question 'How to use deepfake in history?' Tell the students that a general debate is about to start soon. Explain the rules of that problem-solving format. As the moderator, you are in charge of the entire debate in which the students are free to formulate their views and conclusions in front of the whole group. Your role is to ensure that the exchange does not deviate from the point. Set simple rules, such as: our basis is the sources and content found online. Prior to the debate, the students should get familiar with the sources (from A to E). Inform them that during the discussion they should stick to the elements of the decision tree (Exercise 4). For each point, write down comments and conclusions as they arise. Do not express any opinion about the students' work. Sum up the debate.<sup>1</sup>

## **Conclusion**

To conclude, use Source E and ask the students which historical figure they would like to talk to and why. Write down their responses and ask follow-up questions: what would happen if the statements made by a given historical figure created in deepfake technology started to be quoted as true? Is it what the future may look like? Write down any comments the students may have as these will be needed for their homework.

## **Homework**

H.G. Wells, the author of the famous book *The War of the Worlds*, interviewed the Soviet leader Joseph Stalin in 1934. During their conversation, Stalin said that 'Education is a weapon the effect of which is determined by the hands which wield it, by who is to be struck down.'<sup>2</sup> Using a format of your choice (such as essay, presentation or film), refer to the dictator's words in the context of the ever widening use of deepfake. Is the future a dark vision of history filled with fallacies, manipulation and disinformation or a bright one, as heralded by what can be seen at the Salvador Dalí Museum in Florida (Source E)?

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<sup>1</sup>The author's own elaboration based on *Debatowanie jako metoda pracy z uczniami* [accessed 10 December 2020]. Available at [szkolazklasa.org.pl](https://www.szkolazklasa.org.pl/): <https://www.szkolazklasa.org.pl/wp-content/uploads/2016/11/debatowanie-jako-metoda-pracyz-uczniami.pdf>.

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<sup>2</sup> Joseph Stalin, H.G. Wells, *Marxism vs. Liberalism: An Interview [between] Joseph Stalin [and] H.G. Wells* (New York: New Century Publishers, 1945), p. 20 [accessed 10 December 2020].

Available at the University of Central Florida Digital Library:

<https://ucf.digital.flvc.org/islandora/object/ucf%3A5129>.

## Worksheet

### Exercise 1

Use Source A to evaluate whether the statements in the table below are true (T) or false (F).

<b>Deepfake is a widespread phenomenon mainly due to growing internet access.</b>	
<b>Artificial intelligence learns to remember facial expressions, gestures and a characteristic way of speaking.</b>	
<b>Deepfake technology is used to make new films that are not based on original recordings.</b>	
<b>Deepfake may be used for political expediency and discrediting specific candidates.</b>	

### Exercise 2

Use Sources B and C to list two to three negative possibilities of using deepfake technology. Then think about which of them is present most frequently. Try to find online examples of the negative aspects of using deepfake after analysing Sources B and C.

**Your answer:**

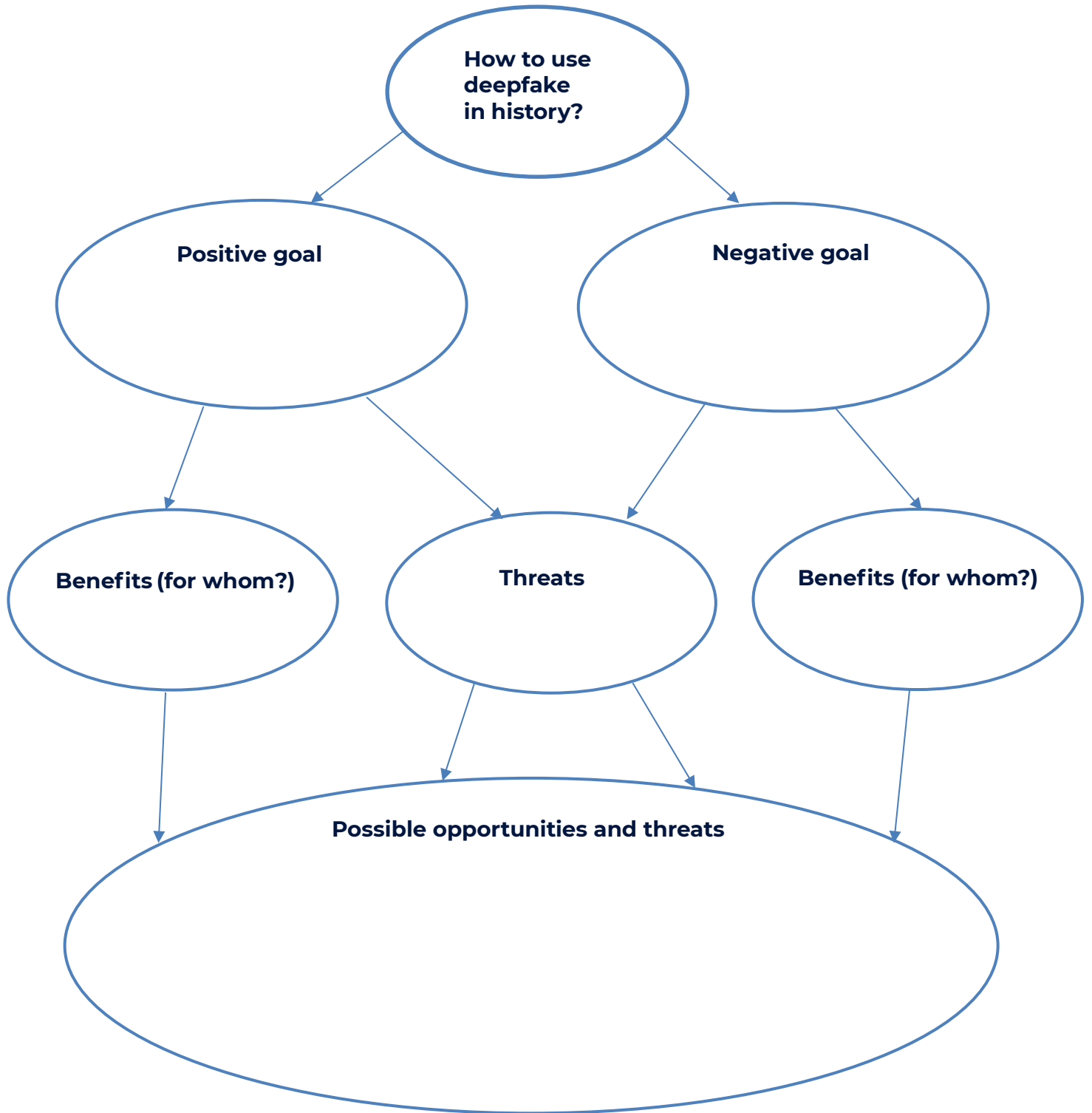
### Exercise 3

Use the Sources to reflect on why it is so easy to believe manipulated materials are true.

**Your answer:**

**Exercise 4**

Study Sources D and E. Think what purposes deepfake may serve in the study of history. Present your considerations using a decision tree as below:



## Answers

### Exercise 1

<b>Deepfake is a widespread phenomenon mainly due to growing internet access.</b>	<b>T</b>
<b>Artificial intelligence learns to remember facial expressions, gestures and a characteristic way of speaking.</b>	<b>T</b>
<b>Deepfake technology is used to make new films that are not based on original recordings.</b>	<b>F</b>
<b>Deepfake may be used for political expediency and discrediting specific candidates.</b>	<b>T</b>

### Exercise 2

Possible answers:

- risks to state security,
- possible voter manipulation (ridiculing politicians, etc.),
- possible election manipulation,
- carrying out disinformation campaigns,
- public opinion manipulation,
- undermining trust in various institutions (social, political and economic; national and international),
- disinformation.

### Exercise 3

Suggested answers:

- lack of knowledge of the original and not using it to check whether manipulation has taken place,
- believing that information available online is reliable,
- the conviction that online materials are massively falsified, thus it is difficult to find which material was the first and which is a reworked copy.



### Exercise 4

A suggested solution (it is just one suggestion; as there many others, it is worthwhile following one's own creativity):

