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**STRATEGIC PARTNERSHIP BETWEEN SCHOOLS
KA2 ACTION, ERASMUS+ PROGRAM
THE VIRTUAL UNIVERSE WE WANT
PROJECT NO: 2016-1-RO01-KA219-024515**

POLAND

KA2 Erasmus+, Strategic Partnership between schools,

The Virtual Universe We Want

Lesson for optional course about Hackers and Crackers

Time	45 min.
Age	9-11
Theme	Hacker and Cracker
Errand the lessons	Show differences between hackers and crackers and learn about the principles of using Internet.
The light of the lesson	<ul style="list-style-type: none"> ▪ Presentation the problem of hackers and crackers ▪ What are the differences between them? <ul style="list-style-type: none"> ▪ How to prevent them?
Exercise for students	<ul style="list-style-type: none"> ▪ “Worming up” the students from the letters of the subject of the lesson create words. ▪ “Summary” the students match definitions to the right people (for example a hacker and his definitions)
Teaching Aids	<ul style="list-style-type: none"> ▪ Links to movies: <ul style="list-style-type: none"> https://www.youtube.com/watch?v=h5_Q7dbaJDE https://www.youtube.com/watch?v=HxySrSbSY7o https://www.youtube.com/watch?v=JdfmV2KW11I

	https://www.youtube.com/watch?v=DKzi5CYNFAg
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- Colorful cards with letters
- Working card with definitions about our theme

Course of lessons

- I. Welcome
- II. “Worming up”
- III. Present a short film from teaching aids.
- IV. Discussion of the differences between hackers and crackers
- V. Demotion in a table on drub the difference.
- VI. Present the next short film from teaching aids.
- VII. Answer with students for question
“How to prevent then?”
- VIII. “Summary”
- IX. Summary of the task
- X. The end

Hackers and Crackers

Who are Hacker?	Who are Cracker?
A person, who searches and uses gaps in the security system of the device. He can also gain access to the secured data with them.	Cracker is a person, who breaks the security system of a device. There are two categories of Crackers actions: <ul style="list-style-type: none">• Breaking closed programs defenses• Breaking servers defenses system
What dangerous situations can Hackers cause ?	What dangerous situations can Crackers cause ?
They endanger with a possibility of losing your data and accounts bound to the device.	Crackers cause permanent damage to the devices defenses system.

How to protect yourself from Hackers and Crackers?

- Don't share your device's IP
- Create passwords to your Wi-Fi
- Install additional security programs
- Avoid suspicious links

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Conspect of lesson – ethics, lesson with tutor

Topic: **AI – artificial intelligence. Threat or opportunity.**

Date: School year 2018-2019

Duration time: 1 h (1 lesson, better 60 min.).

Classes: 13-15 years old (7-8 grade of primary school)

Teacher: Maurycy Kustra

Aims:

Main aim: to increase students awareness on the ethic problem of new technologies and creating AI or organisms

Operational aims: student know what AI is, show advantages/opportunities and disadvantages/threats of scientific research, try to show line between programmed computer and artificial file which want to survive and have own purposes

Methods: Discussion (teacher is leading discussion) and watching movie

Teaching aids: film Ex Machina

(if you have more lessons and can prepare meeting like film society „club of film discussion”) or prepared fragments of this film (1 – 5:30-14:33, 2 – 58:10-1:04:05, 3 – 1:18:55-1:32:00, 4 – 1:33:30-1:38:10). Duration of fragments: 9 min., 6 min., 13 min. and 5 min. = 33 min (45 minutes is not enough, it should be 60 minutes).

When more time, fragment 1 could be longer – since beggining/3:25-15:15.

When short of time (eg. only 45 min. lesson) skip fragment 2.

Lesson scheme:

1. Introduction – saying about what we will talk, but without details or definitions.
2. Watching film – fragment 1.
3. Discussion:
 - what is AI;
 - AI and new technologies: opportunities/advantages and threats/disadvantages;
 - during each part examples of films with these aspects (eg. AI; I, robot; I am legend; Frankenstein; Jurassic Park; Terminator; 28 days later; Planet of the Apes; Resident evil; World War Z; Godzilla; Seksmisja).
4. Watching film – fragment 2.
5. Discussion:

- ethic aspect of acting God,
- line between life and real emotions and *brainless* machine, aspect of the will of survival
- during each part examples of films with these aspects (eg. AI; I, robot; I am legend; Frankenstein; Jurassic Park; Terminator; 28 days later; Planet of the Apes; Resident evil; World War Z; Godzilla; Seksmisja).

6. Watching film – fragment 3 and 4.

7. End – conclusions and lesson summary.