TEACHERS' SUPPORT MATERIALS

12 – 14 YEARS

Co-funded by the Erasmus+ Programme of the European Union

SOCIAL COMPETENCE:

facing the digital era challenges

SOCIAL COMPETENCE:

FACING THE DIGITAL ERA CHALLENGES

TEACHERS' SUPPORT MATERIALS

12 – 14 YEARS

THE RESULT OF THE ERASMUS+ PROJECT

FACING THE DIGITAL ERA CHALLENGES – TEACHING 'DIGITAL' CITIZENS' SOCIAL RESPONSIBILITIES (CSR) USING PRINTED, ELECTRONIC AND SMARTPHONE MEDIA

CZ – HU – IT – GR – RO – SK

2018 – 2021

This Project was conducted under the framework of Erasmus+ Programme, operated by CZ Ministry of European Union Centre for European Union Education and Youth Programmes (Czech National Agency, http://www.dzs.cz) and carried out with a grant provided by the European Commission. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

PROJECT COORDINATOR: David Smetana

Školy Březová – střední odborná škola, základní škola a mateřská škola, Březová, Czech Republic

HEADMASTER: PaedDr. Ludvík Zimčík

PROJECT PARTNERS:

Istituto di Istruzione „Lorenzo Guetti", Tione di Trento, Italy

Core team members: Viviana Sbardella, Rosa Russo, Agnese d'Annibale, Paola Ferrari, Mirella Bertolini

Fondazione don "Lorenzo Guetti", Bleggio Superiore, Italy

Core team members: Alessandra Piccoli, Armin Wiedenhofer

4 EPAL KAVALAS, Kavala, Greece

Core team members: Aggeliki Karanasiou, Maria Katsikari

Základná škola s materskou školou, Červeník, Slovakia

Core team members: Jarmila Gaborová, Magdalena Vranaková, Adriana Demesová

Vrakúň Municipality, Vrakúň, Slovakia

Core team members: Stefan Fazekas, Noemi Varga, Ladislav Kusenda, Janos Csaplar

Suprex Ltd., Felsonyek, Hungary

Core team members: Bela Balogh, Tiborne Fabian, Margit Szabo-Bakosne Rosta, Edit Gyocsi, Bne Nemeth Etelka

Şcoala Gimnazială „Alexandru Roman", Auseu, Romania

Core team members: Adrian Matei Botici, Anca Lucia Mucha, Diana Popa, Ioana Popescu

Školy Březová – střední odborná škola, základní škola a mateřská škola, Březová, Czech Republic

Headmaster: PaedDr. Ludvík Zimčík

Core team members: David Smetana, Ivana Tálská, Vojtěch Král

COVER DESIGN: IOANA POPESCU

COVER PHOTO: SITES.TCS.COM

CONTENT

FOREWORD **7**

I. DIGITAL ERA CHARACTERISTICS **9**

A. DIGITAL TECHNOLOGY 9

B. INFORMATION AND COMMUNICATION IN THE DIGITAL ERA 34

C. PARENTS AND KIDS IN THE DIGITAL ERA 64

II. SOCIAL RIGHTS AND RESPONSIBILITIES IN THE DIGITAL ERA **87**

A. OBLIGATIONS, RESPONSIBILITIES AND RIGHTS 87

B. THE BALANCE OF RIGHTS AND RESPONSIBILITIES 111

C. PRIORITY OF RIGHTS AND OBLIGATIONS IN THE DIGITAL ERA 131

III. SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA **152**

A. COHESION 152

B. SOLIDARITY 174

C. DIVERSITY AND TOLERANCE 196

IV. CO – EXISTENCE OF THE CITIZENS IN THE DIGITAL ERA **217**

A. COOPERATION AND TEAMWORK 217

B. DIVISION OF POWER IN THE DIGITAL ERA 235

C. DEFENDING RIGHTS, INTERESTS, LIMITS AND NEEDS IN THE DIGITAL ERA 253

V. MASS MEDIA AND PUBLIC OPINION **272**

A. MASS MEDIA AND ITS INFLUENCE 272

B. MEDIA LITERACY 294

C. VIRTUAL SOCIETY, ALTERNATIVE REALITY 314

VI. HEALTHY DIGITAL SOCIETY 333
A. SOCIETY CHARACTERISTICS 333
B. MORAL AND ETHICS 352
C. DEVELOPMENT OF THE DIGITAL SOCIETY 369

VII. SOCIAL RESPONSIBILITY FOR THE FUTURE 388
A. SUSTAINABLE DEVELOPMENT OF A SOCIETY 388
B. PROTECTION OF THE ENVIRONMENT IN THE DIGITAL ERA 415
C. FIGHTING THE CLIMATE CHANGE 439

VIII. PERSONAL AND SOCIAL DEVELOPMENT 469
A. SELF – KNOWLEDGE AND SOCIAL SKILLS 469
B. UNDERSTANDING NEEDS AND INTERESTS 491
C. DIFFERENTIATE MOTIVATION FROM MANIPULATION 511

IX. APPENDIX 1 531
CSR (CORPORATE-CITIZENS'-COMMUNITY) SOCIAL RESPONSIBILITY 531

X. APPENDIX 2 555
HOW TO USE SOCRATIVE.COM? 555

XI. APPENDIX 3 560
ONLINE MULTI ROUND GAME 560

IMAGE LIST 561
IMAGE SOURCES 563

FOREWORD

Dear Teachers,

You probably agree with us: social (societal, civic) competence is one of the most important competences the upcoming generation should have. Their lives and the society around them will depend on how active and smart citizens they can be. You will also agree that the coming of the Digital Era has brought unprecedented changes in the life of the society; it has brought new aspects, new methods, new ways of living; it changed how we all go about small or big societal questions. With the support of EU Erasmus+ programme, we elaborated support materials ("Textbook") for your students to learn different aspects of social competence and with this present volume, we wish to help you in teaching those topics and modules that are in the Textbook. Here are some remarks regarding this TSM:

1. TSM fully follows the topic/module sequence of the Textbook. One module is meant to be taught in a 45-minute class – but it depends on you, how much time you devote to this or that theme. You find a sample class plan also – but of course, you decide how you build your teaching methodology. Regarding the latter, we also gave some hints and suggestions – but again, it is up to you to decide how you teach the chosen material.

2. Topics and modules are semi-independent; i.e., you do not have to follow the written sequence. You may choose any topic or module that, in your opinion, fits best into the interests, knowledge level and other objects in the curriculum. You may also wish to ask the students about their opinion, which part to discuss.

3. We elaborated materials for three different media. You keep in hand the written medium, but we have elaborated an electronic version for it too. It is practically a PowerPoint presentation in English and you can find the pictures of the slides in

the TSM – with some place for you to write your remarks and teaching instructions for yourselves. Furthermore – albeit the attitude towards the use of smartphones is very different in different schools – we have elaborated on the smart phone version also. We use Socrative – that smart tool can be of great help in individual learning and also for you, in your classroom work.

4. Written materials provide you with some more information regarding the topics and modules; some background, some more explanation – and also recommended literature for you if you decide to dig more into this or that theme.

All in all, we intended to give you support in teaching those important issues – hopefully, those themes are interesting also for you. We hope we have succeeded in helping you in your important work. The upcoming generation is in your hand – so you also shape how our future will look like.

We wish you well in teaching the Digital – Era Social Competence,

The SOCRATIVE Team

I. DIGITAL ERA CHARACTERISTICS

A. DIGITAL TECHNOLOGY

DIGITAL

According to the definition,[1] ***Digital*** *usually refers to something using digits, particularly binary digits.* If we use digital methodology, we transfer, "translate" everything into the language of numbers and all processes are made as if mathematical processes. "Digital" is an adjective that can be used in great many different notion, like:

- *Digital data*, discrete data, usually represented using binary numbers.
- *Digital media*, media stored as digital data.
- *Digital radio*, which uses digital technology to transmit or receive.
- *Digital television*, television systems which broadcast using digital signals.
- *Digital signal* (electronics), signals formed from a discrete set of waveforms, rather than continuous ranges.
- *Digital signal* (signal processing), sampled analogue signals represented as a sequence of digital values *(ibid.).*

In the same manner, digital electronics are electronic circuits which operate using digital signals. *(ibid.)*

[1] https://en.wikipedia.org/wiki/Digital

WHY DO WE USE DIGITAL METHODS?

Because they are much-much more accurate, especially if we use a binary system: a system where there are two digits, two numbers only: 0 and 1. In contrast to the "analogue" methodology where we handle values as they are and measurement (and thus, calculation with them) is never accurate, the binary characteristics are handled in electronics absolutely simply: if there is current, the value is 1; if there is not, the value is 0. (It is like an electrical switch: if we switch the light, the light is on; when we switch off, the light is gone. We do not have to measure how much light is on, we simply state: "the light is on" or "the light is off." And really, digital systems consist of zillions of switches.

WHAT ARE THE DRAWBACKS OF THE DIGITAL METHODOLOGY?

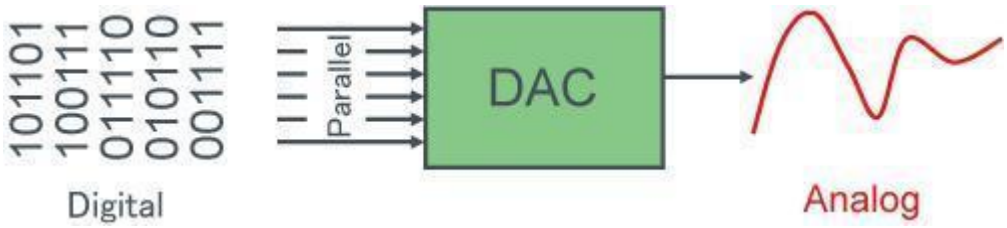
- Our life around us is not digital, it does not consist of just numbers. The car runs faster if we push the accelerator and give more fuel. A loudspeaker sounds louder if bigger currents run through it. That is, we have to transfer, translate our world into digital or from the digital to "normal", which is called analogue. Such transformations are made through "D/A and A/D converters." (D/A means "from digital to analogue" and A/D – "from analogue to digital".) That is, some additional solutions must be implemented to work in a digital system.

- If we use digital methodology, we may need more (sometimes much more) space to handle, to store digital data. It is especially so when we use a binary system: a number in our decimal system may be described by one number/digit (say, 9) while it is 1001 (i.e., four numbers/digits) in a binary system.

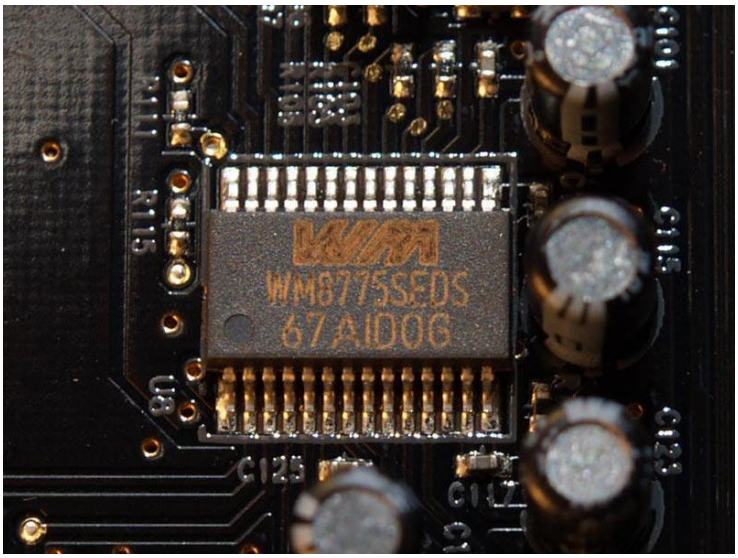
  The basic number of our numeric system is arbitrary, we can choose any number – not just 10 or 2. In fact, there is a so-called "hexadecimal" system in electronics to – here, we use sixteen different signs (digits) to denote a number. Therefore, in a hexadecimal system, one needs less digits to denote a number than in our usual

decimal system.) But for the accuracy reasons, a binary system has acquired an absolutely general acceptance and use.

The first drawback cannot be overruled: we must use those converters. There are a lot of solutions for that task in microelectronics; we may say “there is a solution for everything in microelectronics”. Those D/A and A/D converters are like any other integrated circuit.



Picture 1: A D/A converter (DAC)



Picture 2: A Wolfson Microelectronics-made A/D converter in a circuit

Microelectronics has provided a solution to the second drawback too. In a binary system, more digits are required to denote one number and therefore, much more space to handle it (make mathematical processes with them, store them) – but with the constantly decreasing dimension (distances) in microelectronics, extremely big volumes of digital numbers can be stored. (Just as an example: in a single microprocessor today with less than one cm2 area, more than one billion transistors can be placed.) Therefore, the amount of digital capacity has increased immensely

Earlier, data were stored in their original form, in analogue; (like on a tape recorder) – today, the overwhelming majority of data storing capacity is digital. (In 2002, their amounts were equal and ever since, digital storage increased. Hence we call 2002 "the beginning of the Digital Era".

DIGITAL REVOLUTION

According to the Wikipedia,[2] *The **Digital Revolution**, also known as the **Third Industrial Revolution**, is the shift from mechanical and analogue electronic technology, to digital electronics which began anywhere from the late 1950s to the late 1970s with the adoption and proliferation of digital computers and digital record keeping that continues to the present day.[1] Implicitly, the term also refers to the sweeping changes brought about by digital computing and communication technology during (and after) the latter half of the 20th century. Analogous to the Agricultural Revolution and Industrial Revolution, the Digital Revolution marked the beginning of the Information Age.*

Central to this revolution is the mass production and widespread use of digital logic circuits, and its derived technologies, including the computer, digital cellular phone, and the Internet. These technological innovations have transformed traditional production and business techniques.

Digital revolution is a change to digital technics. It is difficult to name an exact date when it happened; it may be considered anywhere during the last 50 years or so. In that respect,

[2] https://en.wikipedia.org/wiki/Digital_Revolution

2002 mentioned above is a critical date. Now, more than 99% of the data storage capacity in the world is digital.

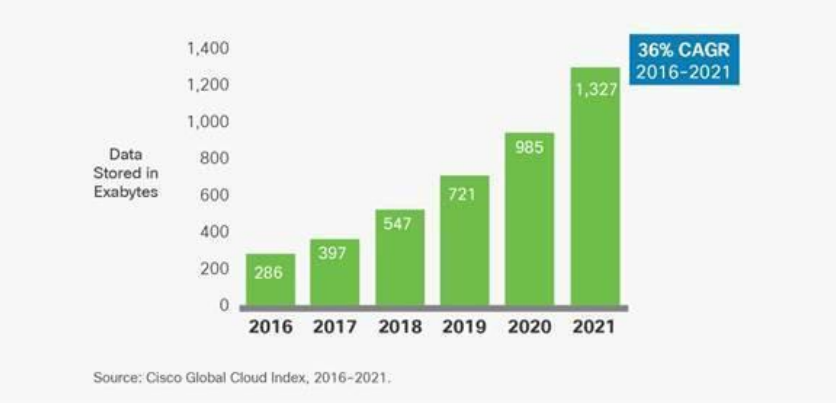
Examples of really big memories:

Picture 3: 128 GB = 128.000.000.000 bytes

Development of microelectronics (and especially it's even more dense variant, nanotechnology) made it possible to manufacture unbelievably large amounts of data storage capacity. As it is shown in the source: [3] below, world data storing capacity will come to 1 zettabyte, i.e., to 10^{21}. Such an amount can be described with 21 zeros after 1 (see also in this source[4]). By 2025, that amount can reach 125 ZB.

[3] https://www.google.com/search?q=world%27s+data+storage+capacity+in+2020&tbm=isch&source=univ&sa=X&ved=2ahUKEwjk9v_rkIfgAhVBiSwKHR1aCh4Q7Al6BAgDEA0&biw=1694&bih=913#imgrc=nCUHuhUKChWFgM

[4] https://en.wikipedia.org/wiki/Zettabyte



Picture 4: Present and expected data storage capacity in the world

1 Exabyte = 1 EB = 1000^6bytes = 10^{18}bytes = 1000000000000000000B = 1000 petabytes = 1millionterabytes = 1billiongigabytes.

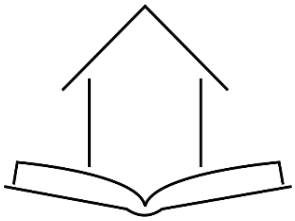
Just to compare those data storage volumes,

- 1 KB = one very short story;
- 1 MB is a small novel; 5 MB can contain all works of Shakespeare;
- 1 GB is 10 metres of shelved books;
- 5 EB can contain all words ever spoken in the world;

It might be thought that such an amount of data storage is more than enough. Not; estimated demand figures surpass the supply in each year: (blue – demand; black – available)

Digital techniques and digital solutions open up an unbelievable amount of new solutions. No wonder, Digital Era kids will have a totally different world ahead of them.

HOMEWORK SOLUTIONS

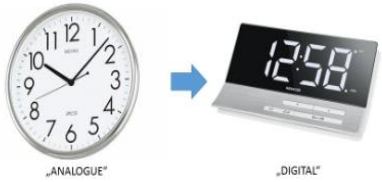


1. Electronics is a simple electrical circuit consisting of many components. When that circuit is made in one single crystal and has a very small dimension, we call it microelectronics. When those dimensions (distances) decrease down to the nanometre range (1 mm = 1 million nanometres), we call such a solution and circuitry nanoelectronics.

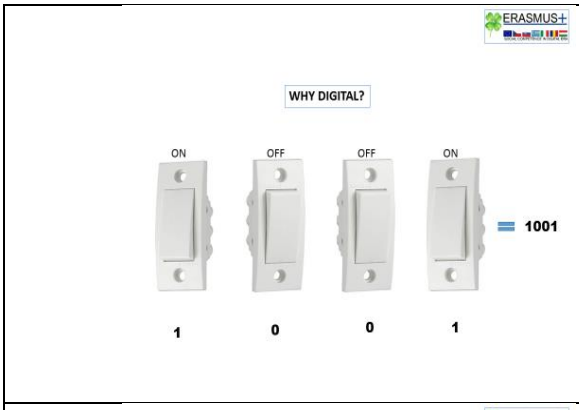
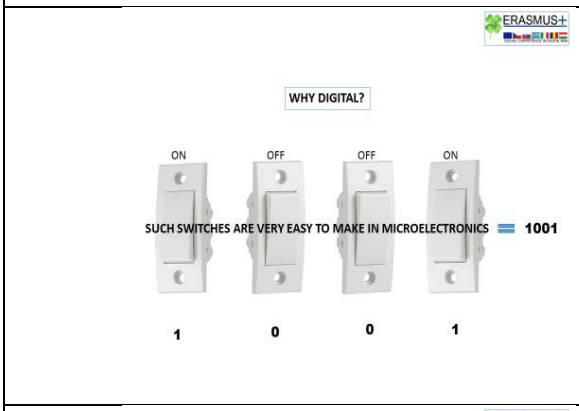
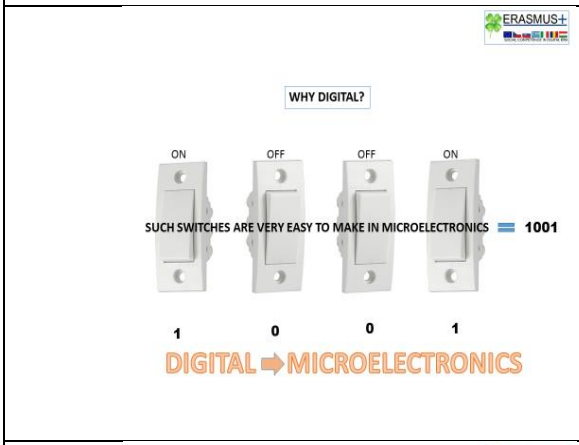
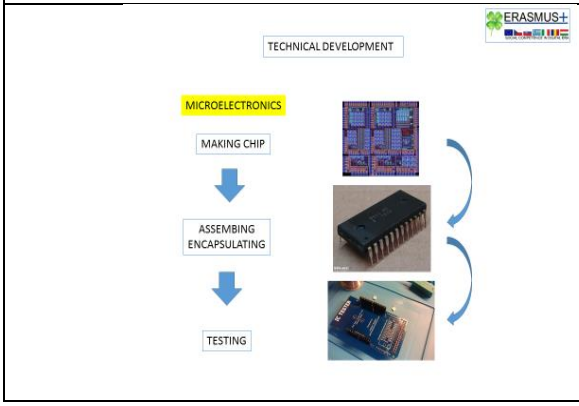
2. Digital means when we characterise everything by numbers. (digits)

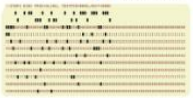
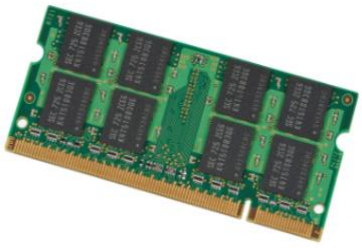
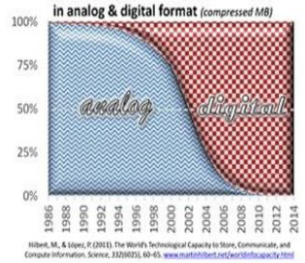
3. Because binary system has just two digits: 0 and 1 and it is easy to make and detect, like a switch: 0 – no light (switched off) and 1 – the light is on (switched on)

ELECTRONIC VERSION

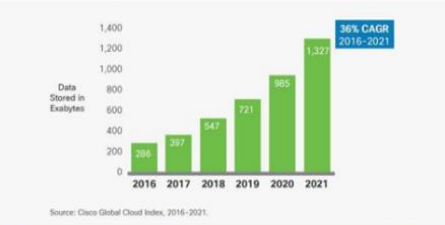
ERASMUS+ I. TOPIC **DIGITAL ERA CHARACTERISTICS** 1. MODULE **DIGITAL TECHNOLOGY**	
ERASMUS+ WHAT IS DIGITAL?	
ERASMUS+ WHAT IS DIGITAL? WHEN SIGNALS ARE CHARACTERISED BY NUMBERS AND NOT LENGTH, WEIGHT, ETC.  „ANALOGUE" „DIGITAL"	

ERASMUS+ **WHY DIGITAL?** **BECAUSE IT IS MUCH LESS SENSITIVE TO DIFFERENT MISTAKES AND DISTORTIONS – PROVIDED IT IS IN THE FORM OF BINARY NUMBERS.**	
ERASMUS+ **WHY DIGITAL?** **BECAUSE IT IS MUCH LESS SENSITIVE TO DIFFERENT MISTAKES AND DISTORTIONS – PROVIDED IT IS IN THE FORM OF BINARY NUMBERS.** DECIMAL NUMBERS TEN DIGITS: 0,1,2,3,....9 WHEN 10 DIGITS ARE NOT ENOUGH, WE USE POWERS OF 10: 0, 10, 100, 1000, ETC. DIGITAL BINARY NUMBERS TWO DIGITS: 0,1 DECIMAL ➡ (2) (4) WHEN TWO DIGITS ARE NOT ENOUGH, WE USE POWERS OF 2: 0, 1, 10, 11, 100, 101, ETC	
ERASMUS+ **WHY DIGITAL?** **BECAUSE IT IS MUCH LESS SENSITIVE TO DIFFERENT MISTAKES AND DISTORTIONS – PROVIDED IT IS IN THE FORM OF BINARY NUMBERS.** DECIMAL NUMBERS TEN DIGITS: 0,1,2,3,....9 WHEN 10 DIGITS ARE NOT ENOUGH, WE USE POWERS OF 10: 0, 10, 100, 1000, ETC. DIGITAL BINARY NUMBERS TWO DIGITS: 0,1 DECIMAL ➡ (2) (4) WHEN TWO DIGITS ARE NOT ENOUGH, WE USE POWERS OF 2: 0, 1, 10, 11, 100, 101, ETC DIGITAL BINARY NUMBERS ARE EASY TO DEPICT: 0 – THERE IS NO CURRENT („SWITCH IS OFF") 1 – THERE IS CURRENT („SWITCH IS ON"	

 ERASMUS+ WHY DIGITAL? ON OFF OFF ON = 1001 1 0 0 1	
 ERASMUS+ WHY DIGITAL? ON OFF OFF ON SUCH SWITCHES ARE VERY EASY TO MAKE IN MICROELECTRONICS = 1001 1 0 0 1	
 ERASMUS+ WHY DIGITAL? ON OFF OFF ON SUCH SWITCHES ARE VERY EASY TO MAKE IN MICROELECTRONICS = 1001 1 0 0 1 DIGITAL ➡ MICROELECTRONICS	
 ERASMUS+ TECHNICAL DEVELOPMENT MICROELECTRONICS MAKING CHIP ASSEMBING ENCAPSULATING TESTING	

DATA STORAGE PAPER FILES PUNCHED CARD  MICROELECTRONIC MEMORY	
A LAPTOP MEMORY CARD STORING 1.000.000.000 BYTES OF DATA 	
MICROELECTRONIC MEMORY CARD STORAGE CAPACITY: 400.000.000.000 BYTES OF DATA	
ANALOG > DIGITAL World's technological capacity to store information in analog & digital format *(compressed MB)*  Hilbert, M., & López, P. (2011). The World's Technological Capacity to Store, Communicate, and Compute Information. Science, 332(6025), 60-65. www.martinhilbert.net/worldinfocapacity.html	

DATA STORAGE CAPACITY IN THE WORLD



IN 2021, 1.327.000.000.000.000.000.000.000 BYTES (1.237 EXABYTES) STORAGE CAPACITY IS FORECASTED. TODAY, WE HAVE AROUND HALF OF IT. (721 EXABYTES)

WHAT IS NANOELECTRONICS?

WHAT IS NANOELECTRONICS?

NANOELECTRONICS IS COMPLEX ELECTRONC CIRCUITS WITH COMPONENTS HAVING NANOMETER RANGE OF DISTANCES

1 NANOMETRE IS THOUSAND TIMES LESS THAN 1 MICRON

1 MM IS 1.000.000.000 NANOMETRES

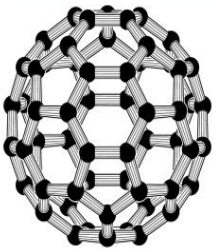
NANOMETRES AND MOLECULES

THE SMALLEST MOLECULE IS H_2 = 0.74 ANGSTROM

1 NANOMETRE = 10 ANGSTROM

10 NANOMETRES = CA 135 PIECES OF A HYDROGEN-MOLECULE

WITH NANOELECTRONICS, WE ARE IN THE RANGE OF MOLECULES

A SMALL BALL MADE OF ATOMS OF CARBON  IT MAY BE USED AS ANY OTHER BALL IN USUAL MACRO-DIMENSIONS	
DATA STORAGE CAPACITY OF THE HUMAN BRAIN HUMAN BRAINS ARE MADE UP OF 100.000.000.000 NEURONS EACH ONE HAS MORE THAN 1000 CONNECTIONS MAKING UP 100.000.000.000.000 NEURON CELLS = 100.000 GIGA = 250 PIECES OF 400 GB MEMORY DISCS (OR 10 TIMES MORE...)	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is the industrial revolution?

a) When agriculture started a revolution
b) When industry started a revolution
c) **When industry started to develop very fast**
d) When industry started to develop much slower
e) When agriculture started to grow very fast

2. What is an information society?

a) When information was born
b) When we read a newspaper
c) When information is not important in the society any more
d) **When information became very important in the economy and society**
e) When economy started to be important in the information

3. **How was the development of microelectronics?**
    a) It started in 19th century
    b) **It started with the invention of transistor and later, integrated circuits**
    c) It started when integrated circuits became too big
    d) It started with the development of nanoelectronics
    e) Microelectronics did not develop

4. **Why are digital solutions better?**
    a) They are not better
    b) There are no digital solutions
    c) Because we can count with our fingers
    d) Because digital solutions are greener
    e) **Because digital solutions are much more accurate**

5. **What is the "Digital Era"?**
    a) **It is our days; the last decade when digital solutions became overwhelming**
    b) It is last century when we counted with our fingers
    c) It is 2019 since it is called Digital
    d) It is the next twenty years
    e) We do not have a "Digital Era"

6. **Who are the "digital citizens"?**
    a) The ancient Greeks
    b) The citizens of Digitalis
    c) **Today's citizens; mostly the young generation**
    d) Those who are going to be born after 2020
    e) There are no digital citizens

7. **What is an integrated circuit?**
    a) That contains one transistor
    b) That do not contain transistors at all
    c) That are moving in circles
    d) **That are complex electronic systems consisting of many electronic components**
    e) That are complex electronic systems containing transformer

8. **What is chip-making?**
    a) **Production of silicon chips. It is the first phase of microelectronic production**
    b) Production of a transistor; it is the last phase of microelectronic production
    c) We produce a chip after the transistor is ready
    d) It is what we make of potatoes
    e) We cannot produce chips yet

9. **Why do we call microelectronics?**
    a) Because it is used in electronics
    b) Because it consists of chips
    c) Because it is very complex
    d) Because we cannot use them
    e) **Because distances are microns in it**

10. **What is nanoelectronics?**
    a) **Electronic components with distances of the nanometre range**
    b) We do not have nanoelectronics
    c) When microns are too hot, we make nanoelectronic devices
    d) It is electronic devices on which “nano” is written
    e) It is a group of nine microelectronic devices

TRUE – OR – FALSE SENTENCES

1. The Industrial revolution started in the 20. century. **FALSE**
2. Industrial revolution is when agriculture started to develop fast. **FALSE**
3. Information is what is important for us to orientate. **TRUE**
4. Information society when information became extremely important also in the economy. **TRUE**
5. Microelectronics are electronic devices with very small dimensions and distances. **TRUE**
6. Integrated circuit which makes movements in circles. **FALSE**
7. Digital solutions are when everything is characterised by numbers. **TRUE**
8. Digital solutions are better because they are greener. **FALSE**
9. One of the most important processes in electronics nowadays is data processing. **TRUE**
10. Data storage devices are called memories. **TRUE**

OPEN – END QUESTIONS

1. What is manufacturing? *(When masters work by hand.)*
2. What is the machine industry? *(When a lot of machines are used and also produced.)*
3. What is an information society? *(A society where information plays a crucial role in the society and in the economy.)*
4. What is “digital” *(When everything is characterised by numbers.)*
5. Why are digital solutions good? *(Because it is much more accurate.)*

OPEN – END SENTENCES

1. Digital data are … *(the ones that are characterised by numbers).*
2. The Digital Era started … *(when digital solutions became the majority).*
3. Digital storage is … *(when data is stored in memories in digital form).*
4. Microelectronics is … (when electronic devices are characterised by very small distances – microns).
5. Chip-making is the … *(first)*, assembly is the … *(second)* and testing is the … *(third)* big step in microelectronics.

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what „digital" and „digital solution" mean.
2. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Digital technics is of general importance in life: pupils should fully understand that whatever they do, and use their mobile phone or computer, they are based on digital solutions. We live in a Digital Era.
4. Understanding of the notion „digitalisation" is vital in general terms also: it makes pupils understand that they must be aware what „digital" means and what consequences it has.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each. The following themes are proposed for the pupil's minilecture:
   a) ***What is a digital solution? Its characteristics and features.***
   b) ***Why do we use digital solutions?***
   c) ***How to make transit from decimal system to binary and back?***¨

Debates or brainstorming over some concepts. The following themes are proposed for debates or brainstorming:

a) ***Why do we use digital systems?***
b) ***Why is microelectronics so important?***
c) ***Why are kids called „digital citizens"?***

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm.

For more innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides No 2 and 16. are meant for short discussions and the summary of the discussion and the right short answers to those slides are on the next slides: No. 3. and 17-19. respectively.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
   - https://www.youtube.com/watch?v=8dG1FQntd5g (Boolean algebra, 5'45")
   - https://www.youtube.com/watch?v=2xXErGeeb_Q&list=PLlqjnBcbd7ufgeygWBWivubSDYRFAgdxY&index=5 (Digital electronics; 6'37")
   - https://www.youtube.com/watch?v=btgAUdbj85E (Analog vs digital; 5'30")
   - https://www.youtube.com/watch?v=XZmGGAbHqa0 (Google data centre, 5'27")
   - https://www.youtube.com/watch?v=qm67wbB5GmI (How a CPU is made; 10'15")
   - https://www.youtube.com/watch?v=WxJKXGugfh8 (Digital and analog; 4'01")

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A**.
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

Level/Grade:	6 – 8 (Age group 12-14)
Title:	**DIGITAL TECHNOLOGY**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to : • what "digital" is; • what is the importance of microelectronics and nanoelectronics; • what is the importance of data processing; • how digital technology and the internet interrelate.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• systems • informatics • electronics, microelectronics, nanoelectronics • computer technics

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is "digital"?**
- **What is microelectronics?**
- **What is information?**

Teacher makes sure that students understand what “digital” is and what its characteristics are. **Interaction:** T-Ss, Ss –T **Time to be allocated**: 10 min.
Activity two: What do you think: what is information society **Procedure**: It can be a game. Students write their own opinions and explanations for the question and the teacher evaluates their guesses. The English language is the language of the internet, so the teacher can speak about the importance of English learning too. **Interaction:** T-Ss, Ss –T, Ss-Ss **Time to be allocated**: 8 min.
Activity three: What is digital and what is analogue and why are they so important? **Procedure**: Students discuss the question; it can also be in the form of a brain storming. The teacher speaks about the reasons of the importance. **Interaction:** T-Ss, Ss-Ss **Time to be allocated:** 10 min.
Activity four: Discussion about the emergence of the Digital Era **Procedure**: Teacher introduces the question and students speak about it. Discussion points will be: digitalisation, digital data storage, Digital Era characteristics **Interaction:** T-Ss, Ss-Ss; **Time to be allocated**: 12 min.
Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Digital

- https://www.rohm.com/electronics-basics/ad-da-converters/what-are-ad-da-converters
- https://en.wikipedia.org/wiki/Digital_Revolution
- https://www.allaboutcircuits.com/textbook/digital/chpt-15/why-digital/
- https://en.wikipedia.org/wiki/Data_storage
- https://www.dataversity.net/brief-history-data-storage/
- https://www.frontierinternet.com/gateway/data-storage-timeline/
- https://en.wikipedia.org/wiki/Punched_card
- https://www.quora.com/Can-analog-signals-be-stored-in-a-memory-If-not-why
- https://www.cnsnevada.com/what-is-the-memory-capacity-of-a-human-brain/
- https://www.scientificamerican.com/article/new-estimate-boosts-the-human-brain-s-memory-capacity-10-fold/
- https://en.wikipedia.org/wiki/Zettabyte)

B. INFORMATION AND COMMUNICATION IN THE DIGITAL ERA

INFORMATION

Information is anything that informs us about the status of the changes in the world surrounding us, in our closer or wider environment. Information must be new, relevant and useful, otherwise it is not information for us. This criterion means that an information for somebody is not necessarily an information for somebody else. Further, a very valuable information for somebody is not necessarily equally valuable for somebody else. Signals are approaching us through all our senses: eye, ears, nose, skin, taste. Consequently, if our relevant receiving organ does not function, the information – even if it is available – cannot prove to be information. Signal of a locomotive is not information about its approach to a deaf person.

Information is vital for our life. We live in constant interaction with our environment and we orientate it after the information we receive about the person-environment interaction. Without information, mankind cannot survive. **We call a carrier of the information a "medium"** (Lat.; = tool)**; in plural – "media".**

Information can be any signal of our environment – in fact, any change in it. If outside temperature falls, it is a sign for us to take on a coat. If we see it is raining, it is an information for us to take an umbrella with us. If we hear the dog bark, we suppose somebody is coming to visit us. No information is death; death of the informer and also for the receiver.

Picture 5: Information from and about our environment

In a sense, we can generalise as information any exchange of a signal between any two or more partners, not necessarily living creatures: in a general sense we can define that the force of a magnet is an information for a piece of steel “come closer”. However, information is usually understood between a living object and its surroundings. (A well-known example is how the sunflower turns after the sunshine or how many plants close their blossoms when the dark falls. Signals about/from/between animals are easy to be understood also as information – indeed, our dog can “read” our face.

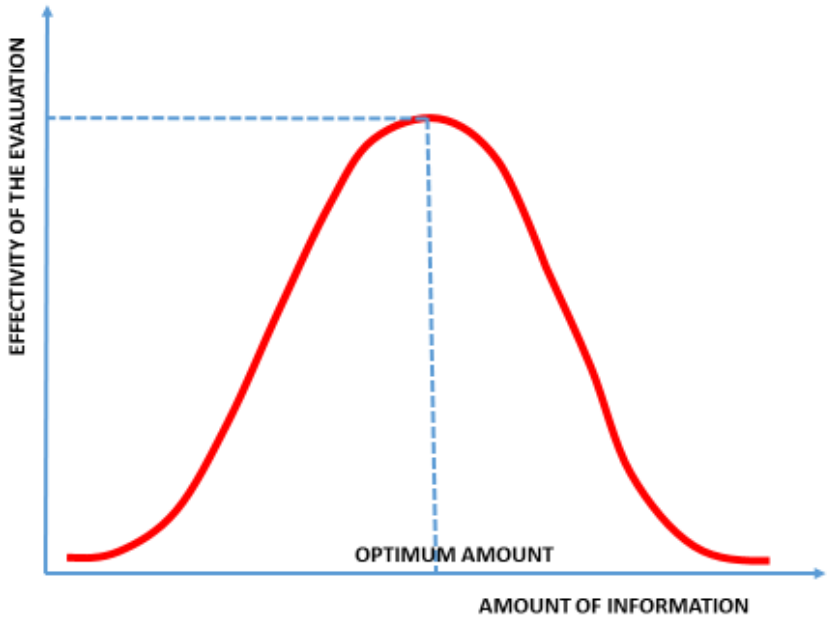
In a narrower – and usual – sense, we regard information between the environment and a person. (”Environment” can of course also be another person.) As above, we define information for us as that is new, relevant and useful. The more information we can actively receive and evaluate, the clearer is our knowledge about the environment.

In itself, a signal is not an information before we – willy-nilly – evaluate it. It may be an active, conscious evaluation process, but it can also be an automatic process, when we simply “take note of it”. Our brains evaluate everything which comes to us, even if we realise it or not and if it is really important and relevant, we actively recognise it as an information. If not important, not new, not relevant, it often does not come to our consciousness - it is a natural defence mechanism against the mass of information which comes to us each second.

Evaluation process and evaluation effectiveness depend mostly on our expertise, former experience and present knowledge. Therefore, the evaluation process and its effectiveness is highly individual and can be influenced – that is the basis for motivation and in worse cases, for manipulation. Evaluation process can be influenced to evaluate a given signal as we wish the other person to evaluate. That is why we teach our kids (and ourselves) to evaluate information as well and soberly as possible.

Information effectiveness also depends on the amount of information. Obviously, if the amount is very low, effectivity (i.e., the amount of recognised, valuable information) is also low and effectivity increases with the amount of the received information. However, when the amount of information to be evaluated surpasses a certain limit (the optimum amount), the effectiveness (and thus the relative amount of evaluated information) starts to

decrease – our brains (evaluating capacity) starts “to be flooded”. I.e., **we do not need little information, we do not need much information, and we need enough information.**



Picture 6: Evaluation effectivity as function of information amount

That optimum amount is always subjective and the curve is one of the most important tools in politics, when politicians or influencers want us to believe what and how they want us to believe. A usual tool for a politician to talk too much; and as the curve says, too much is too little – i.e., real meaning, real ideas may remain hidden. Overflow with information kills our sober evaluation ability.

Picture 7: “How to decide…?!”

The task of objective education is to increase the effectiveness of the information evaluation. As it was said above, it depends on

- the effectivity of the receiving process;
- the amount of our relevant experience;
- the level of our relevant knowledge

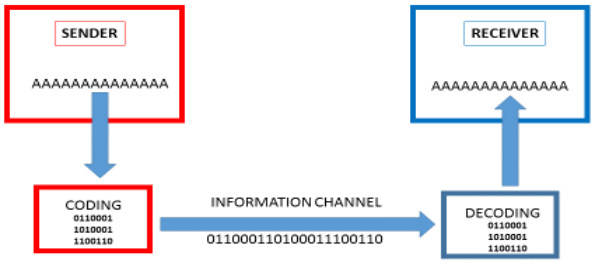
The effective evaluation of the information received through media is called “media literacy” It is by far one of the most important characteristics of a sober, conscious person who want to keep the ability to sober evaluation; it is one of the most important tools in the social (civic) competence nowadays, in the Digital Era.

According to the definition[5] ***Media literacy*** *encompasses the practices that allow people to access, critically evaluate, and* create media*. Media literacy is not restricted to one medium and therefore has had several different attempts to have a specific definition over the years. Media literacy definitions have been defined based on general skills pertinent to all media or definitions relating to specific mean forms of media.*

[5] https://en.wikipedia.org/wiki/Media_literacy

INFORMATION FLOW

Information signal propagates from the Sender to the Receiver through the so-called information flow.



Picture 8: Information flow

It consists of several parts:

1. **Coding, the coder**

   It is needed to change the originally created signal into understandable and transmittable packet of information. If the Sender speaks English and the Receiver is French, this coder may be an English> French translator. Further, the signal may also be turned into digital signals (digits) so that it propagates through the communication channel without distortion.

2. **Information channel**

   It may be anything: an electric wire, air through which radio waves or voice propagate, optical cable through which optical signals propagate, etc.

3. **Decoding, decoder**

   Its task is to turn the signal into the form that is understood by the receiver. It may again be a translator, or a D/A decoder (see the module above) or any other suitable unit.

Accuracy of the information flow is crucial. If the received signal is not what was intended to be sent, we call information distortion. In our day-to-day life, we usually call it “misunderstanding”.

It can be a summary result of the following factors:

- *Original mistake at the Sender*: he/she wanted to send a message but something happened; it was “a slip of tongue”; the information sent was not really what the Sender wanted to send. “Oh, I did not mean that”.
- *Coding mistakes*. No coder, no translator can code the information to be sent perfectly; some distortion remains always.
- *Information channel mistakes*. The line is not perfect either; all kinds of minor or bigger mistakes (distortions) may happen. Here, digital signals are much more accurate than the classical, analogue ones; and that is the reason why everything is digitised nowadays; that is why we live in a Digital Era.
- *Decoding mistakes*. They may be similar to the coding mistakes.
- *Mistake at the Receiver*. The decoded signal may have been correct, but the Receiver “understood it in another way”. A distortion that happens very often.

Any mistake in the communication in the information flow may be fatal: just think of Jules Verne’s “In search of the Castaways” (“The children of the Captain Grant”): misunderstandings of the translation (and completion) of the distorted message of the Captain caused a long, round-the-Globe search. Therefore, controlling the accuracy of the information flow is crucial. From the technical side, the accuracy is maximised through using digital solutions; they are the most accurate means known today. (But they are also not perfect!) In principle, accuracy could be controlled if we could put the sent and the received information pieces side by side and compare the two. We can do it with the techniques, but the inevitable part of the communication flow is the two sides, the two persons; and we cannot fully determine, what goes on in the brains of the Sender and in the brains of the Receiver. In the information flow including also the sending and the

receiving persons, accuracy of the information flow cannot be fully controlled and 100% accuracy cannot be guaranteed. **To improve the accuracy, we need a critical element: feedback**.

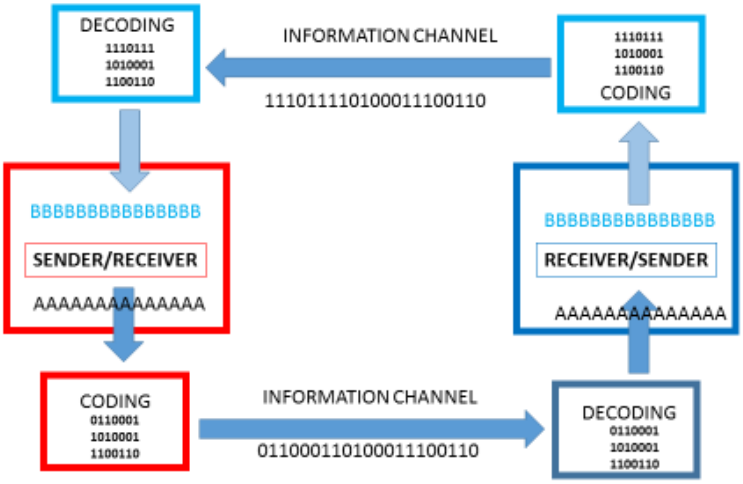
COMMUNICATION

There is a very important moment in the above definition for media literacy: it goes also for **creating** information. As usual, the receiver of the information also reacts somehow after the evaluation – i.e., an information usually creates a reverse flow of information too. **If it is one-sided, one-directional, we call it information; two-sided, mutual information is called communication.** Communication is an exchange of information.

According to the definition[6] communication *(from Latin communicare, meaning "to share") is the act of conveying* meanings from one entity or group to another through the use of mutually understood signs, symbols, and semiotic rules.

The above definition does not fully emphasise the two-sidedness, the mutuality of the information exchange. Through that two-sided, bidirectional information flow, a communication flow is established.

[6] https://en.wikipedia.org/wiki/Communication



Picture 9: Communication flow

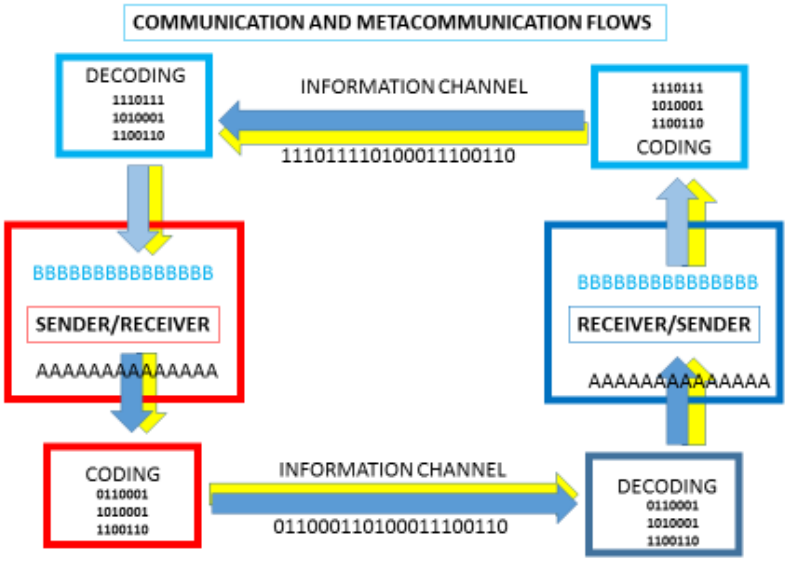
Communication flow is now capable of proving the accuracy of the information flow: the feedback simply gives information as to how the previous information was understood. If well, everything is OK; if not, partners clarify and correct the misunderstanding.

COMMUNICATION AND METACOMMUNICATION

In parallel to human communication, always a second channel of communication called **metacommunication occurs.** According to the definition[7], ***Meta – communication*** *is a secondary communication (including indirect cues)* about how a piece of information is meant to be interpreted. It is based on the idea that the same message accompanied by different meta-communication can mean something entirely different, including its opposite, as in irony. *It is also called "communication about communication".*

[7] https://en.wikipedia.org/wiki/Meta-communication

“Communication about communication” is a definition of critical importance. We communicate and at the same time, **we add information about what we communicate.** With metacommunication, the communication flow is modified:



Picture 10: Communication plus metacommunication

Metacommunication is not simply a second channel of communication in many respects:

1. Since metacommunication is practically the sum of different body signals during the exchange of information, it cannot be transmitted for bigger distances. **Metacommunication is basically part of personal communication.** True, electronic communication can convey images of the speaker (like in TV or video telephone) and voice with all its characteristics can also be transmitted, electronic communication cuts a considerable part of metacommunication. The picture above does not correctly reflect the real situation;

2. **Metacommunication is automatic; it is not a conscious process**. Therefore, it cannot be modified or consciously constructed as any other direct communication,

like a speech. **That means that while we can say what we want, true it or not, our metacommunication cannot lie.** That is why we say “metacommunication is a communication about communication”; our metacommunication informs our partner about what we really think. Now, communication and metacommunication may not convey the same contents: we may say we are sorry while we are not; we may say we are not tired while we are, or we like something while we do not. In such a case, communication and metacommunication convey contradicting contents. Since communication is conscious and metacommunication is not, **when the two channels convey contradicting information, we automatically believe what metacommunication suggests.** Metacommunication cannot lie. When metacommunication supports, reinforces what we say, we say “the person is credible”**. The deadly danger of our present, Digital Era electronic communication is that the “credibility-check”- metacommunication is mostly missing, giving thus way to lies, fake news, and manipulation.**

3. As we see, coding and decoding are critical parts of the communication flow. Coding transfers the information into transmittable form like into our voice and language we use and decoders turn it back into understandable sets of signals. (Just imagine a Spaniard talking to a Chinese and their common language being English – the first interpreter turns Spanish into English and the second – English into Chinese. In principle, metacommunication contents should be coded/decoded in the same way. The problem is, national characteristics of metacommunication are absolutely not the same as that of the other nation. I.e., for the transfer of communication and metacommunication, two sets of coders and two sets of decoders should be used – which is never the case. That is, a vitally important part of the communication will be lost. Similar is the case during the personal conversation through an interpreter. He/she translates the contents but cannot translate the metacommunication. (Good interpreters try to do it too; when Hitler was shouting, his interpreter shouted too) That is why the saying says “talking through an interpreter is like kissing through the window”.

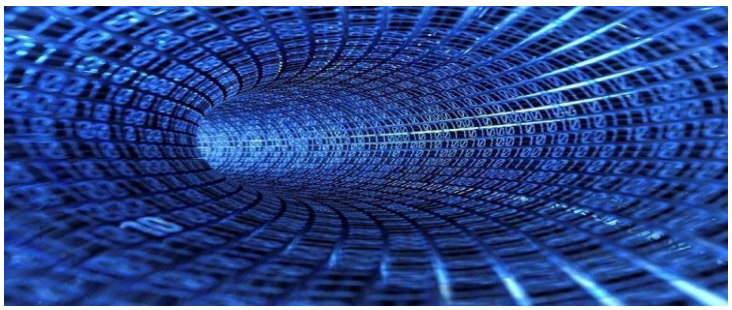
4. While communication rules can be learned quite easily, metacommunication – not. Since metacommunication is unconscious, we can learn how to watch for metacommunication signals, how to understand them better, but we cannot learn how to "make" them. We cannot learn how our body should behave when we lie – we can acquire some two-second skills, but our body "opens us up" in a very short time.

COMMUNICATION IN THE DIGITAL ERA

There are two main characteristics of the present communication:

1. It is mainly through artificial, electronic, digital channels: e-mails, Facebook, mobile phones, Internet. As we saw above, such channels greatly decrease the amount of metacommunication, i.e., greatly decrease our chances to verify the credibility of the communicated contents. **The Digital Era has opened up the possibility for cheating, misinformation, manipulation.**

2. The amount of information we receive each second is by far more than the digestible amount; we are well beyond the maximum point on the information evaluation effectivity curve. We are simply carried away on the "information highway".

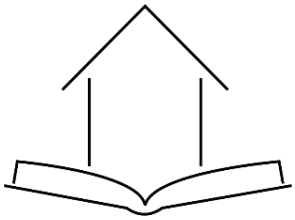


Picture 11: Mass of information

For those reasons, it is imperative that we teach our kids to be media literate – while we adults, teachers ourselves are not literate, either…**Media literacy is probably the most important tool for social (civic) competence in the Digital Era.**

As it was cited above, media literacy is the ability to soberly and critically evaluate the information we receive, especially through mass media channels. We do not have the metacommunication telling the truth, but we have different sources of media that present (and evaluate, comment) the same fact from different angles, giving thus us a sort of "dispersion of views and interpretations". Based on that, we can judge what to believe and what not and what to control, how and where. We must admit: the fully objective communication (information) is gone; the only thing is, how close we can come to the truth.

HOMEWORK SOLUTIONS

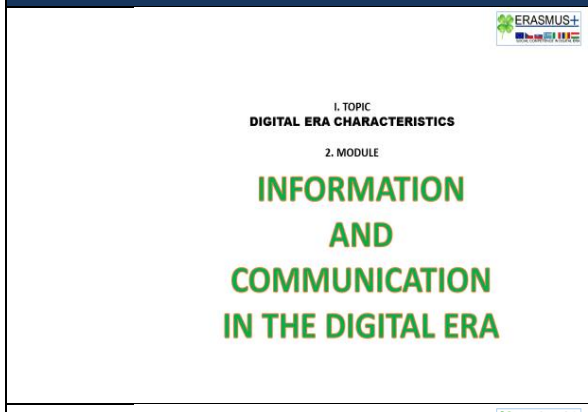
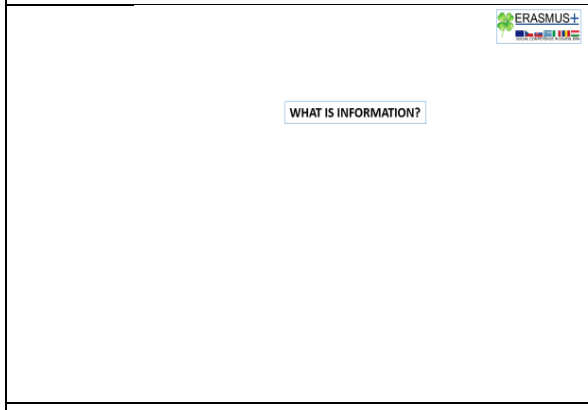
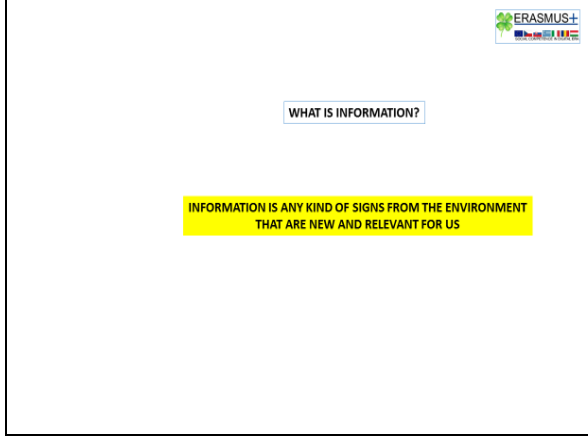


1. When somebody talks, he/she assumes that the information content is not known to the listener; i.e., he/she is in a superior position and the listener is in the inferior. When the listener answers, the position changes: now the talker (the listener) gets into the upper position. That changing position goes on till they talk.

2. When we say we are sorry but we say it with a big smile. Or we say in a very good mood while we are bitterly weeping.

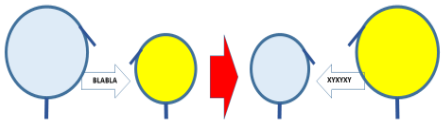
3. Usually, electronic communication with a friend many times surpasses the time we directly talk with him/her.

ELECTRONIC VERSION

ERASMUS+ INFORMATION IN THE NATURE 	
ERASMUS+ INFORMATION IN THE NATURE „I MUST TAKE AN UMBRELLA"	
ERASMUS+ INFORMATION CHANGE BETWEEN ANIMALS 	

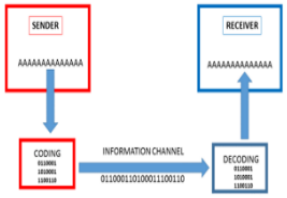
ERASMUS+ INFORMATION CHANGE BETWEEN ANIMALS „ARE YOU AN ENENY OR A FRIEND..?"	
ERASMUS+ INFORMATION CHANGE BETWEEN ANIMALS „NOW I KNOW I DO NOT HAVE TO BE AFRAID OF YOU AND YOU-ME. I KNOW NOW THAT WE ARE FRIENDS"	
ERASMUS+ HUMAN INFORMATION EXCHANGE 	



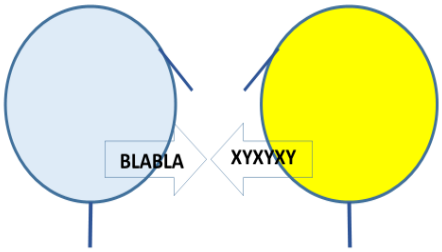
INFORMATION FLOW EXCHANGE

INFORMATION FLOW

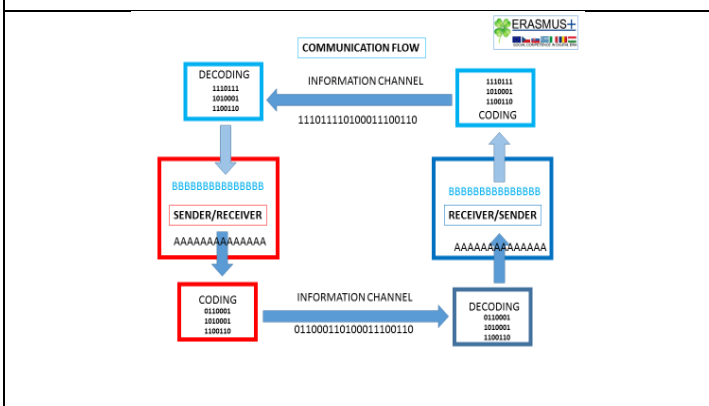
INFORMATION FLOW

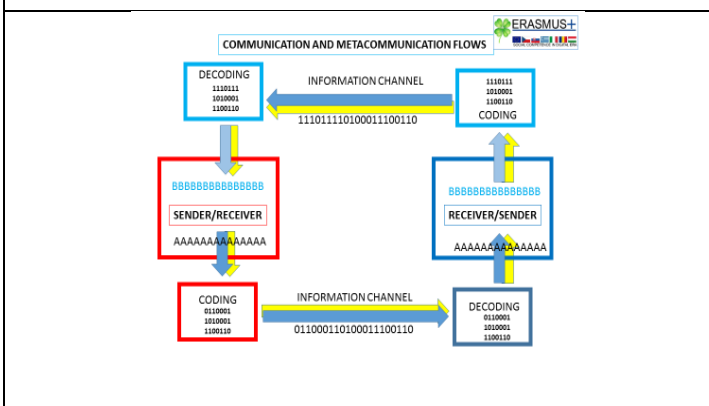


IN COMMUNICATION, PARTNERS ARE EQUAL



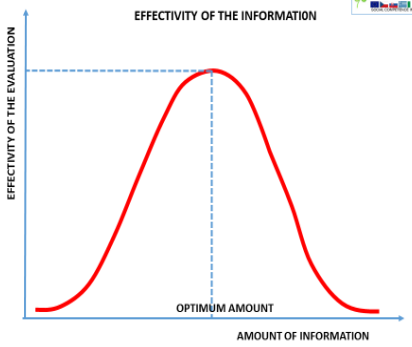
ERASMUS+
COMMUNICATION


ERASMUS+
COMMUNICATION FLOW
DECODING
1110111
1010001
1100110
INFORMATION CHANNEL
111011110100011100110
1110111
1010001
1100110
CODING
BBBBBBBBBBBBBBB
SENDER/RECEIVER
AAAAAAAAAAAAAAA
BBBBBBBBBBBBBBB
RECEIVER/SENDER
AAAAAAAAAAAAAAA
CODING
0110001
1010001
1100110
INFORMATION CHANNEL
011000110100011100110
DECODING
0110001
1010001
1100110


ERASMUS+
COMMUNICATION AND METACOMMUNICATION FLOWS
DECODING
1110111
1010001
1100110
INFORMATION CHANNEL
111011110100011100110
1110111
1010001
1100110
CODING
BBBBBBBBBBBBBBB
SENDER/RECEIVER
AAAAAAAAAAAAAAA
BBBBBBBBBBBBBBB
RECEIVER/SENDER
AAAAAAAAAAAAAAA
CODING
0110001
1010001
1100110
INFORMATION CHANNEL
011000110100011100110
DECODING
0110001
1010001
1100110

ERASMUS+
METACOMMUNICATION – „BODY LANGUAGE"
Point
Counter-Point
IMPORTANT IS NOT ONLY WHAT YOU SAY BUT ALSO HOW YOU SAY AND HOW YOU LOOK

NEWS
mass
communication


EFFECTIVITY OF THE INFORMATION
EFFECTIVITY OF THE EVALUATION
OPTIMUM AMOUNT
AMOUNT OF INFORMATION

facebook
twitter
YouTube
Gowalla
foursquare
tumblr.
WordPress
LinkedIn
flickr
Technorati
yelp
blogtalkradio
USTREAM
del.icio.us
Your Business
Your Site

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is information?

a) **Information is data about the surrounding world**
b) Information is what we feel when it is hot
c) Information does not exist
d) Information is when we talk to each other
e) Information is what we did not say

2. What is communication?

a) It is what we say to the radio
b) It is what we do not say to anybody
c) **It is when we exchange information with our partner**
d) It is when my friend talks to me
e) It is when I tell something to my friend

3. What is metacommunication?

a) It is when two meta communicate with each other

b) It is when two small children talk to each other
c) It is when two dogs bark
d) It is when we are silent
e) **It is gestures and other signs occurring in parallel with our communication**

4. **Why is metacommunication so important?**
   a) Otherwise we do not understand foreigners
   b) **It is communication about the communication; reveals our real thoughts**
   c) It is not important at all
   d) Otherwise we do not understand the meta people
   e) Otherwise we cannot see the colours

5. **How communication and metacommunication work together?**
   a) They do not work together
   b) Metacommunication comes first; communication – after
   c) Communication comes first, metacommunication – after
   d) **They occur at the same time and we can judge about the credibility of the partner**
   e) Metacommunication does not exist

6. **How has communication changed in the Digital Era?**
   a) It has not changed
   b) Communication has disappeared
   c) **Since communication mostly became digital, a lot of metacommunication is lost**
   d) Digital Era has suppressed the communication
   e) Communication is lost, metacommunication remained

7. **What is media literacy?**
    a) It is to read a lot
    b) It is the ability to count
    c) It is understanding foreign languages
    d) It is talking a lot
    e) **It is the ability to evaluate the media news smartly**

8. **What is motivation?**
    a) **It is persuading someone to do something**
    b) It is talking with somebody
    c) It is listening to somebody
    d) It is asking somebody to do something
    e) It is doing nothing

9. **What is manipulation?**
    a) **It is influencing somebody to act in the interests of the manipulator**
    b) It is influencing somebody to act in the interests of the manipulated
    c) It is learning who wants what
    d) It is asking to do a favour
    e) It is an order to do something

10. **What is our most important communication organ?**
    a) **Our eyes**
    b) Our tongue
    c) Our hands
    d) Our fingers
    e) Our nose

TRUE – OR – FALSE SENTENCES

1. Information is always two-sided. **FALSE**
2. Communication is never one-sided. **TRUE**
3. Metacommunication is the communication with meta. **FALSE**
4. Communication goes in parallel with metacommunication. **TRUE**
5. Metacommunication is communication about communication. **TRUE**
6. Metacommunication reveals the credibility of the talker. **TRUE**
7. Digital communication is mainly through electronics. **TRUE**
8. In digital communication, most of the metacommunication is lost. **TRUE**
9. Digital communication does not allow manipulation. **FALSE**
10. Motivation is natural and honest, manipulation is usually dishonest. **TRUE**

OPEN – END QUESTIONS

1. What is information flow? *(It is the sequence of information from the speaker to the listener.)*
2. What is communication? *(Exchange of information)*
3. What is metacommunication? *(Different automatic signs accompanying the communication.)*
4. What happens to the metacommunication in digital communication? *(It is mostly lost.)*
5. Why is it easy to manipulate in digital communication? *(Since metacommunication is mostly lost.)*

OPEN – END SENTENCES

1. Motivation is … *(to persuade somebody to act in a way).*
2. Manipulation is … *(to persuade somebody to act in the interests of the manipulator).*
3. Digital communication is specific because … *(the metacommunication part is mostly lost).*
4. Partners in communication take … *(equal)* position.
5. Most of the communication goes through … *(metacommunication).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what information and communication are and what characteristics they have nowadays.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The concept of information and communication is of general importance in life: pupils should fully understand that life cannot be without them.
4. Understanding information and communication principles is vital in general terms also: it makes pupils understand that they must be fully aware of the characteristics and pitfalls of the Digital era communication.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each. The following themes are proposed for the pupil's minilecture:
    a) ***Information and information channels.***
    b) ***Communication and its characteristics.***
    c) ***Metacommunication and its importance.***
    d) ***Digital Era communication forms and patterns***

Debates or brainstorming over some concepts. The following themes are proposed for debates or brainstorming:

a) ***How living creatures (not only people) communicate?***
b) ***What are the characteristics of our modern communication?***
c) ***What are the dangers of the present mass communication?***

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide No 2. and 6. are meant for short discussions and the summary of the discussion and the right short answer to the slides are on the next slide: No. 3. and 7.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using electronic version may become very effective
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
   - https://www.youtube.com/watch?v=QrMSP42L168 (Information flow on Twitter, 0'59")
   - https://www.youtube.com/watch?v=tt1-Ohe9QQU (Mobile communications principles, 11'27")
   - https://www.youtube.com/watch?v=ixSUBl1WNxk (Result-driven communication, 1'17")
   - https://www.youtube.com/watch?v=ihKXQbYeV5k (Non-verbal communication – birds 4'59")
   - https://www.youtube.com/watch?v=ig49aXCsioo (Manipulation, 6'15")

- https://www.youtube.com/watch?v=l4tWdTmYZoM (Psychological tricks, 7’47”)
- https://www.youtube.com/watch?v=_bi6TGu3H6A (body language examples, 6’24”)

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**INFORMATION AND COMMUNICATION IN THE DIGITAL ERA**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to : • what information and communication is; • what makes the difference between information and communication; • what metacommunication is; • how information and communication properties changed during the Digital Era.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• systems • information and communication • sociology • politics

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquires about the Ss' mood. To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is information?**

- **What is information flow?**
- **Why is information important?**

Teacher makes sure that students understand what information is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity two: What do you think: why information is so important?

Procedure: It can be a game. Students write their own opinions and explanations for the question and the teacher evaluates their guesses. The English language is the language of the internet, so the teacher can speak about the importance of the English language in communication too.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 8 min.

Activity three: What is communication and metacommunication and why is it so important?

Procedure: Students discuss the question; it can also be in the form of a brain storming. The teacher speaks about the reasons of the importance.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity four: Discussion about the importance of metacommunication in the Digital Era

Procedure: Teacher introduces the question and students speak about it. Discussion points will be: the role of metacommunication, credibility, and media literacy in the Digital Era.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 12 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

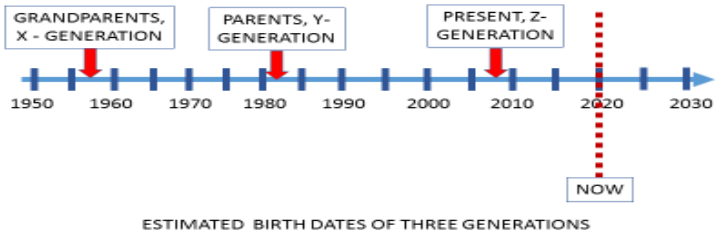
USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Information
- https://en.wikipedia.org/wiki/Communication
- https://en.wikipedia.org/wiki/Media_literacy
- https://en.wikipedia.org/wiki/Meta-communication
- https://www.carolroth.com/blog/communication-skills-hows-your-metacommunication/
- https://en.wikipedia.org/wiki/Mass_media
- https://www.google.com/search?q=manipulation&oq=manipulation&aqs=chrome..69i57j0l5.7475j0j7&sourceid=chrome&ie=UTF-8
- https://www.wikihow.com/Read-the-Signs-of-a-Guy-Liking-You
- https://www.psychologytoday.com/us/blog/let-their-words-do-the-talking/201607/5-ways-tell-someone-likes-you

C. PARENTS AND KIDS IN THE DIGITAL ERA

BORN INTO OR LEARN?

Supposing that the average age of parents having a baby is 25 years, we can identify several probable birth dates for the X. Y and Z generations: around 2005-2010 for the kids, around 1980-85 for their parents and around 1955-60 for their grandparents. That is, if the youngsters are 10…15 years old, their parents are around 35…40 and their grandparents – around 60…65. The question is – what is characteristic for those generations' vis-à-vis digital and electronic issues; what they experienced and learned in their life...?



Picture 12: Estimated birth dates of three generations

First of all – everything is learnable and one can learn till one lives. (That is exactly what LLP – life-long learning program – states and promotes). In that sense, there is no difference between the three generations. However, **there are very different levels, methods and effectiveness of that learning process.**

- **The most effective way of learning when we are "born into something**". Then, the child takes it natural for example, that there is air, we walk, the central heating heats our flat and we use electricity – albeit the last two are not "that" natural; our grandparents – especially in remote, small communities – not always had electricity and there was no central heating at all, basically. For the generation of

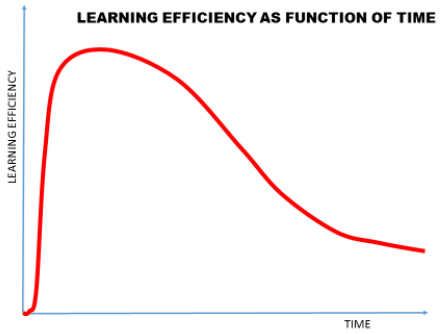
parents, electricity was a commonplace and central heating became more and more natural too.

Those “natural” issues greatly influence our level of knowledge – just imagine the reading and learning possibilities and habits when there was no electric light and at 16:00, it is already dark in winter… The learning habits, the learning patterns and the learning opportunities were limited and thus learning effectiveness was much lower. **The most effective period of learning is early childhood – like we learn to speak.** Very often, kids learn and do something (say, on a computer) that they do not understand at all and of course cannot explain why they do it so – simply they do and do it in the right way. We do not think how to breathe; just breathe.

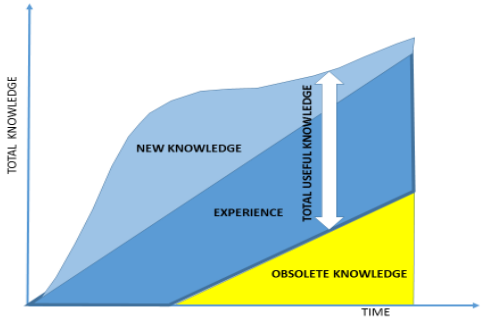
- Of course, we learn also in the school; things like mathematics or history. But what we acquire that knowledge as something “additional” to the world around us; something we did not know and now we learn. That knowledge appears as “alien”, “outside” first before it is really acquired and becomes “inside”, i.e. natural and naturally used by us. That period is also effective, but not as effective as early childhood.

- One can learn after school, too. In that learning process, we rely more and more on our experience - but we lose more and more the experience in the learning process. Therefore, the effectiveness of the learning drops even lower.

- With the learning effectiveness decreasing, there is another phenomenon that hits us: bigger and bigger parts of our knowledge become obsolete, useless. So, as the years fly by, we learn less and less effectively and what we did learn earlier, becomes more and more obsolete – i.e., the amount of **useful** knowledge becomes less and less.



Picture 14: Learning efficiency



Picture 13: Total knowledge over time

The process of acquiring knowledge, gaining experience and then decreasing new knowledge and growing obsolete part of the knowledge is well known to all of us. We cannot help for part of our experience (and also knowledge) to become obsolete; what we can do is to maintain the process to acquire new knowledge. That is the aim of LLP.

Obsolescence of the given experience and also the knowledge depends on the characteristics of the given experience and knowledge. The time for which half of the knowledge becomes obsolete is called half-time and it depends on the subject. All fast growing sciences (electronics, microelectronics, computer science, and informatics) become obsolescent very fast; their half-time is just some years.

Based on the above, the given generation can rightly be characterised by the world it was born into. Of course, learning is always possible, but what generation brings "in its blood" is highly characteristic.

CHARACTERISTICS OF THE Z – GENERATION

The present upcoming generation (called Z-generation) was born into the internet, mobile phone, Facebook, e-mails and therefore, into "a virtual world". The main characteristics of the pupils is that dichotomy: parallel existence of the real world and society with the virtual ones, and problem-free jumping from one to the other.

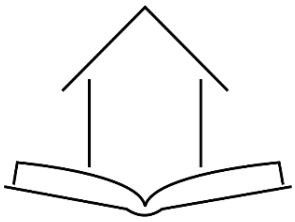
- Problem-free parallel activities in the virtual space. E.g. being on Facebook, watching YouTube, chatting with friends and in the meantime, listening to music. The multiple time sharing is absolutely normal for them;
- Unprecedented growth (development) rate of the technical background definitely influences (determine) the way of thinking of the kids, but the development is so fast that the research into psychology cannot cope with it. **Therefore, we must accept that with our kids, we jump into the dark**.
- We must be sure that all pastime plays and entertainment is gone for the Z-generation. They play mostly on Internet games. The Z-generation is a digital native.
- The Z-generation is much more sensitive to the forms and design and feels it always has another chance. (The consequence of digital plays with “several lives”.)
- They are too lazy to learn in the classical way, since they know they can get the knowledge of the world at their fingertips. Therefore, classical, static, factual knowledge is gone. On the other hand, combinative intelligence is much higher than that of their parents.
- The Z-generation masters internet-based knowledge much easier than the previous generation; the “knowledge gradient” (from more knowledgeable to the less) is changed. It makes the new generation self-confident and sometimes nasty. They formulate easily what a parent (a teacher) should do in the concrete situation and they are right very often – but it is regarded as impoliteness, uneducatedness, utilitarianism.
- The kid feels at home “where my phone connects to the internet automatically.”
- Kids form a lot of virtual communities and they feel very well in them.
- The Z-generation is very weak in handling real conflicts (since they handle online conflicts only and they are solved in another way than in the real world).
- Kids rate all those kinds of knowledge that Google does not provide them very high and they are keen to learn it. (Decision making, conflict management, etc.)
- Kids feel very well in their virtual societies; they can be very effective team players – in the virtual world; they have a number of “friendly circles” – even if they have

never met and possibly will never meet; since one friend lives, say, in Alaska and the other – in New Zealand.

- The Z-generation may be very friendly and show real solidarity with his/her virtual friends – their sacrifice may be really huge and real.
- Since they live mostly in their virtual reality, they do not have realistic expectations about the “real world”.
- The Z-generation has definite problems in establishing contacts (especially long-term contacts) with the previous generation.
- Digital world (and especially digital games) improve space-feeling, decrease reaction time, and the speed of recognising small details.

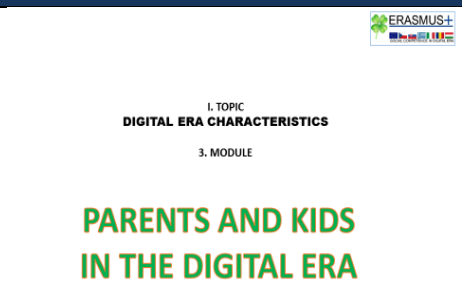
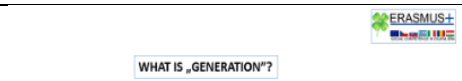
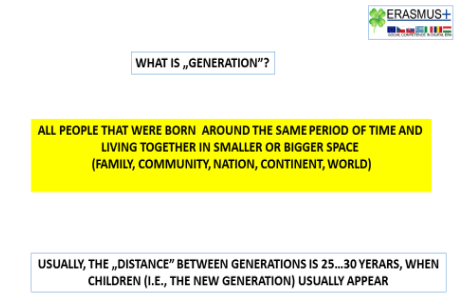
The Z-generation is not better or worse than their parents – they are simply other to a very high degree. The difference between the Y and Z-generations (let alone Z and X) has never been so enormous during the history of mankind as today. To bridge the gap – it is an inevitable task of the Y-generation. Parents (teachers) must bear in their minds that the Z-generation is much stronger than parents in their virtual world and virtual reality but much weaker than the latter in the real world.

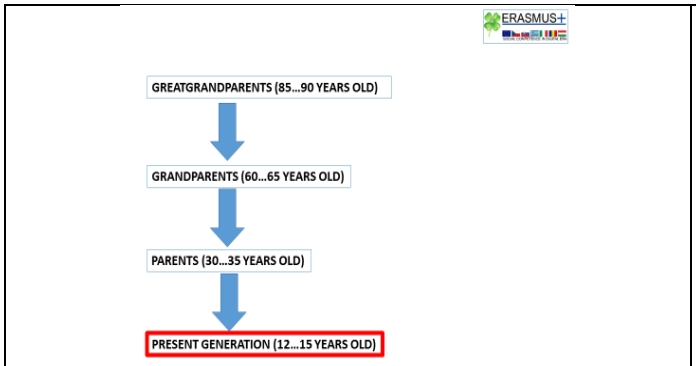
HOMEWORK SOLUTIONS

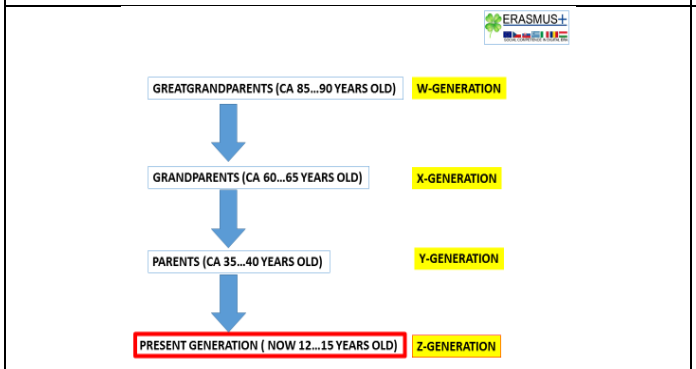


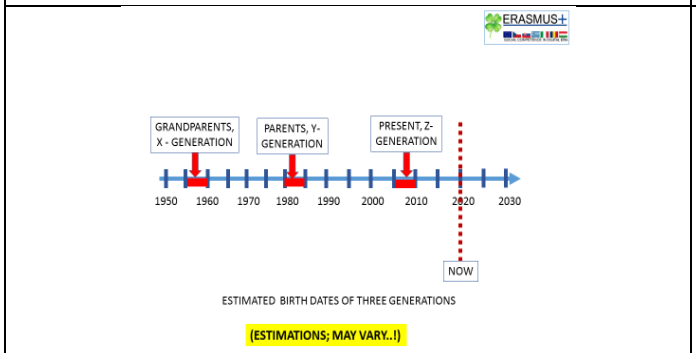
1. Technical development (mostly in electronics) resulted in the appearance of microelectronic components and those components allowed us to elaborate very complex electronic systems like computers. Computers changed our life.
2. Questions:
    a. In 2018, 55.1% of the world population had internet connection, i.e. internet penetration was 55.1%;
    b. The most of the internet users are in Asia;
    c. The highest internet penetration rate is in Europe, where 85.2% of the population has internet connection.

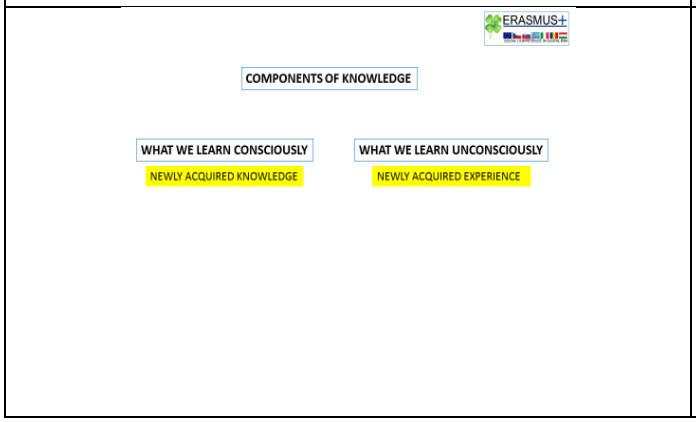
ELECTRONIC VERSION

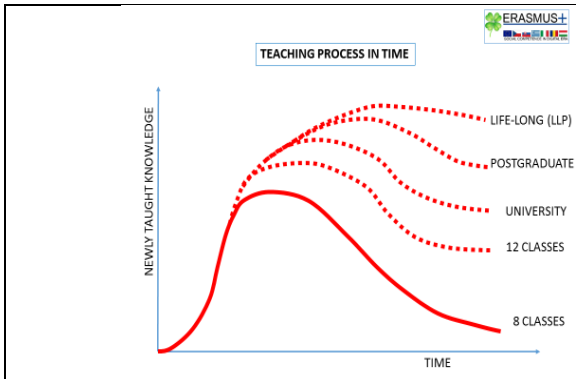
SLIDES	NOTES
	
	
	

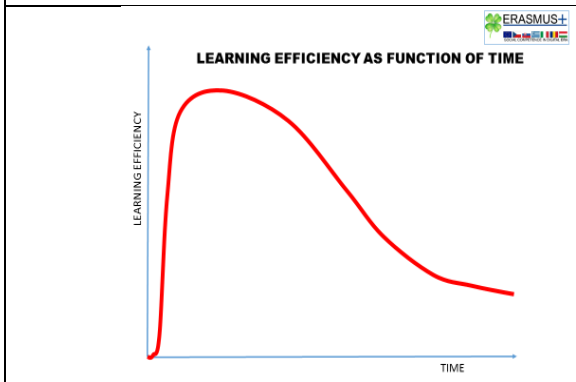

ERASMUS+
GREATGRANDPARENTS (85…90 YEARS OLD)
GRANDPARENTS (60…65 YEARS OLD)
PARENTS (30…35 YEARS OLD)
PRESENT GENERATION (12…15 YEARS OLD)

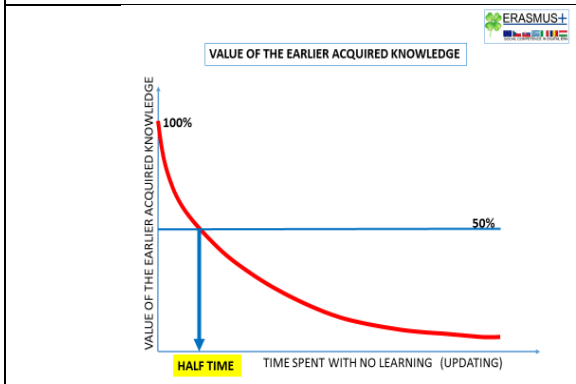

ERASMUS+
GREATGRANDPARENTS (CA 85…90 YEARS OLD)
W-GENERATION
GRANDPARENTS (CA 60…65 YEARS OLD)
X-GENERATION
PARENTS (CA 35…40 YEARS OLD)
Y-GENERATION
PRESENT GENERATION (NOW 12…15 YEARS OLD)
Z-GENERATION

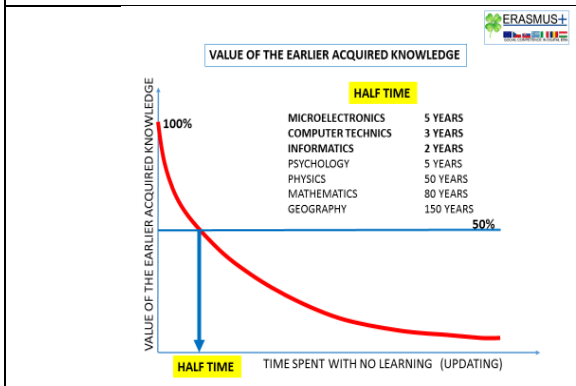

ERASMUS+
GRANDPARENTS, X - GENERATION
PARENTS, Y-GENERATION
PRESENT, Z-GENERATION
1950
1960
1970
1980
1990
2000
2010
2020
2030
NOW
ESTIMATED BIRTH DATES OF THREE GENERATIONS
(ESTIMATIONS; MAY VARY..!)

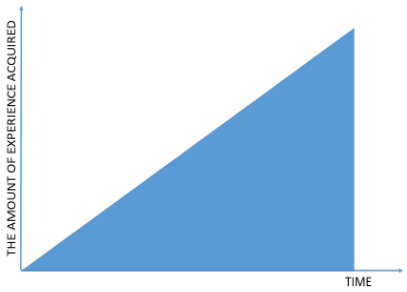
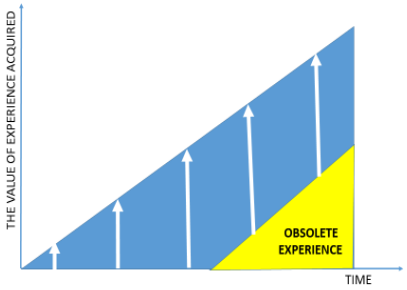
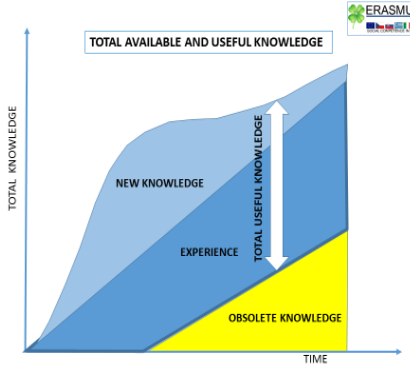

ERASMUS+
COMPONENTS OF KNOWLEDGE
WHAT WE LEARN CONSCIOUSLY
NEWLY ACQUIRED KNOWLEDGE
WHAT WE LEARN UNCONSCIOUSLY
NEWLY ACQUIRED EXPERIENCE


ERASMUS+
TEACHING PROCESS IN TIME
NEWLY TAUGHT KNOWLEDGE
LIFE-LONG (LLP)
POSTGRADUATE
UNIVERSITY
12 CLASSES
8 CLASSES
TIME


ERASMUS+
LEARNING EFFICIENCY AS FUNCTION OF TIME
LEARNING EFFICIENCY
TIME


ERASMUS+
VALUE OF THE EARLIER ACQUIRED KNOWLEDGE
VALUE OF THE EARLIER ACQUIRED KNOWLEDGE
100%
50%
HALF TIME
TIME SPENT WITH NO LEARNING (UPDATING)

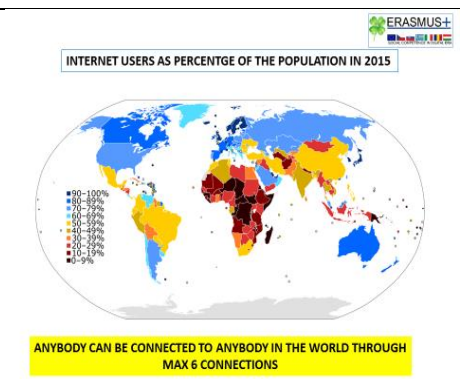

ERASMUS+
VALUE OF THE EARLIER ACQUIRED KNOWLEDGE
HALF TIME
MICROELECTRONICS 5 YEARS
COMPUTER TECHNICS 3 YEARS
INFORMATICS 2 YEARS
PSYCHOLOGY 5 YEARS
PHYSICS 50 YEARS
MATHEMATICS 80 YEARS
GEOGRAPHY 150 YEARS
VALUE OF THE EARLIER ACQUIRED KNOWLEDGE
100%
50%
HALF TIME
TIME SPENT WITH NO LEARNING (UPDATING)

THE AMOUNT OF EXPERIENCE  	
THE VALUE OF EXPERIENCE  	
TOTAL AVAILABLE AND USEFUL KNOWLEDGE  	
THE MOST IMPORTANT KOWLEDGE IS • WHAT WE ARE „BORN INTO" • WHAT WE LEARN BEFORE THE NEW GENERATION APPEARS EVERYTHING IS LEARNABLE! NEVER STOP LEARNING!	

ERASMUS+
„ELECTRICAL GRANDPARENTS"

ERASMUS+
„ELECTRONIC PARENTS"

ERASMUS+
„DIGITAL KIDS"
IPv4 address in dotted-decimal notation
172 . 16 . 254 . 1
10101100.00010000.11111110.00000001
8 bits
32 bits (4 bytes)


ERASMUS+
INTERNET USERS AS PERCENTGE OF THE POPULATION IN 2015
90–100%
80–89%
70–79%
60–69%
50–59%
40–49%
30–39%
20–29%
10–19%
0–9%
ANYBODY CAN BE CONNECTED TO ANYBODY IN THE WORLD THROUGH MAX 6 CONNECTIONS

ERASMUS+ REVERSE TEACHING DIGITAL KIDS IPv4 address in dotted-decimal notation 172 . 16 . 254 . 1 10101100.00010000.11111110.00000001 8 bits 32 bits (4 bytes) ELECTRONIC PARENTS	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. **What is characteristic for the generation of grandparents in the sense of technology?**
   a) **electricity and radio**
   b) LCD TV
   c) Internet
   d) mobile phone
   e) Facebook

2. **What is characteristic for the generation of parents in the sense of technics?**
   a) Internet
   b) SMS and email
   c) Facebook
   d) **VCR and colour TV**
   e) smart phone

3. **What is it: “Digital Era”?**
   a) It is the 20.th century
   b) It is around 1950
   c) It is the cultural revolution
   d) **It is the era of digital communication; it is now**
   e) Digital Era is coming in 100 years

4. **What are the general characteristics of the Digital Era?**
   a) the availability of a car
   b) the availability of electricity
   c) **mobile internet, virtual society, Facebook**
   d) missiles to the Jupiter
   e) big armies

5. **What is microelectronics?**
   a) a very small piece of a colour TV
   b) **electronic circuits with very small dimensions and distances like a micron**
   c) electronics for very small people
   d) mathematics for the universities
   e) there is no such product as microelectronics

6. **What is nanoelectronics?**
   a) **It is the same as microelectronics, but with even smaller distances (nanometres)**
   b) It is electronics for mini - TV’s
   c) It is electronics for transformers and trains
   d) It is electronics for nanopeople
   e) It is electronics for big ships

7. **What is the easiest we can learn?**
    a) What we read
    b) What we hear
    c) What we taste
    d) **What we are born into**
    e) What comes after us, when we finished the school

8. **How does the effectiveness of our learning change over time?**
    a) It increases all the time we live
    b) It decreases all the time we live
    c) It is constant all the time we live
    d) **It increases first but if we stop learning, the effectivity decreases fast**
    e) It decreases in the beginning but increases after we stop learning

9. **How does our experience change over time?**
    a) It is constant till we live
    b) It decreases till we live
    c) **It increases till we live**
    d) It decreases first but then it increases
    e) It increases first but then it decreases

10. **How does our useful experience change over time?**
    a) It is constant till we live
    b) It decreases till we live
    c) It increases till we live
    d) It decreases but later on, it increases
    e) **It increases but later on, more and more knowledge becomes obsolete**

TRUE – OR – FALSE SENTENCES

1. Our grandparents, when they were born, did not know what the internet was. **TRUE**
2. LED colour TV's appeared in the middle of the 20th century. **FALSE**
3. Our grandparents did not know what radio was. **FALSE**
4. Our parents were familiar with VCR's. **TRUE**
5. Our parents had to learn the internet; it did not exist when they were born. **TRUE**
6. Desktop computers appeared five years ago. **FALSE**
7. Laptops were known in the times of our grandparents already. **FALSE**
8. The Internet has around 100 million connections nowadays. **FALSE**
9. Facebook is for sharing photos only. **FALSE**
10. Reverse teaching is when the younger generation teaches the older. **TRUE**

OPEN – END QUESTIONS

1. Why can we call our grandparents "electrical generation"? *(Electronics was not developed when they were born.)*
2. Why can we call our parents "electronic generation"? *(Electronics was developed already when they were born.)*
3. Why can the present generation be called "digital kids"? *(Because they were born in the Digital Era already.)*
4. How does the effectiveness of learning change over time? *(It increases but after school, it decreases fast.)*
5. What happens to our experience over time? *(It increases constantly, but later, the bigger and bigger part becomes obsolete.)*

OPEN – END SENTENCES

1. Reverse teaching is when … (*kids teach their parents).*
2. Kids understand the Internet much better than their parents, since … *(they were born into the Digital Era).*
3. Nanoelectronic devices are with … *(nanometre)* distances.
4. For every generation the easiest is to learn … (what they were born into).
5. Microelectronics started from the invention of the transistor in … (*1948).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what generation characteristics are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The concept of generations' difference is of general importance in life: pupils should fully understand that their parents and even more, grandparents were born into an entirely different world.
4. Understanding of the notion „generation gap" is vital in general terms also: it makes pupils understand that they must be active and teach their parents to the digital world; that is the reverse teaching.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each. The following themes are proposed for the pupil's minilecture:
    a) ***What is a generation?***
    b) ***Samples of products parents and grandparents became familiar with when they were born***
    c) ***What is reverse teaching?***

    Debates or brainstorming over some concepts. The following themes are proposed for debates or brainstorming:
    a) ***What is it kids are familiar with but parents - not?***
    b) ***Digital era characteristics***
    c) ***How can kids teach the older generations to „digital"?***

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
    - https://www.youtube.com/watch?v=TtIojDWOsgg (generations; 8'51")
    - https://www.youtube.com/watch?v=aqdm6aBUZII (X vs Z-generation, 6'44")
    - https://www.youtube.com/watch?v=jHpbdQCMnwQ (Generation Y, 10'06")

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**PARENTS AND KIDS IN THE DIGITAL ERA**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to: • what is natural for their parents in the Digital Era; • what is natural for the pupils in the time of digital communication; • what are the main differences between the two generations; • what is it, "reverse teaching"; • how to bridge the gap between the parents and their kids.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• systems • electronics • sociology • computer technic • human behaviour

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquires about the Ss' mood. To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is "generation"?**
- **What is usual for a generation?**
- **What is "natural" for today's kids which is not for their parents?**

Teacher makes sure that students understand what sustainability is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity two: What do you think: what is characteristic for a generation?

Procedure: It can be a game. Students write their own samples for the differences and the teacher evaluates their guesses. The English language is the language of electronic communication, so the teacher can speak about the importance of English learning.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 8 min.

Activity three: What are the characteristic features for your parents' generation?

Procedure: Students discuss the characteristics. It is important to note for the teacher: kids talk about his/her generation! Teacher speaks about the ideas of the kids and evaluates them, possibly objectively.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity four: What are the characteristic features for your generation, generation Z?

Procedure: Teacher introduces the question and students speak about it. After discussion or brainstorming, the teacher evaluates the kids' opinion.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 12 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- https://blog.myheritage.com/2013/10/living-together-several-generations-under-one-roof/
- http://socialmarketing.org/archives/generations-xy-z-and-the-others/
- https://www.visioncritical.com/gen-z-versus-millennials-infographics/
- http://lynn-library.libguides.com/c.php?g=591810&p=4092057
- https://en.wikipedia.org/wiki/History_of_television
- https://en.wikipedia.org/wiki/History_of_mobile_phones
- https://en.wikipedia.org/wiki/History_of_computing_hardware
- https://en.wikipedia.org/wiki/History_of_the_Internet
- https://www.weforum.org/agenda/2016/12/by-2030-this-is-what-computers-will-do/
- https://en.wikipedia.org/wiki/Nanoelectronics

II. SOCIAL RIGHTS AND RESPONSIBILITIES IN THE DIGITAL ERA

A. OBLIGATIONS, RESPONSIBILITIES AND RIGHTS

TEACHING OBJECTS

This module intends to offer the basic knowledge about what obligations, responsibilities and rights are in order to become active citizens in contemporary society. This module wants to offer a definition and to describe the interconnection between rights, obligations and responsibilities, pointing out their origin and mutual dependence.

OBLIGATIONS

The juridical duty is the subjective legal situation of the subject of law who must keep a determined behaviour imposed by the norm. Duty can be positive, when the behaviour imposed by the norm consists in doing or giving, or negative, when instead it consists in a non-doing; in the first case it is also called command, in the second prohibition.

The legal norms that impose duties are rules of prescriptive conduct. The conduct that constitutes a violation of duty, to which the legal system reconnects a sanction, is illicit. The contrast between this behaviour and the norm that establishes the duty is called anti-juridical.

Duty is a passive subjective legal situation, attributed by the legal system to a subject in the interest of another to whom the corresponding active situation is attributed, the subjective right (in the sense of a claim). Moreover, according to part of the doctrine, duties that are not related to a subjective right of others are conceivable and such duties would be typical of public law.

According to the nature of the related subjective law, within the meaning of the duty understood in the broad sense are distinguished:

- The duty in the strict sense, exclusively negative, related to an absolute right that can be asserted against any subject;
- the obligation, positive or negative, related to a relative right that can be asserted against one or more determined subjects.

The idea that duty is the basic subjective legal situation of law is widespread. In fact, it is easy to return to the duty the other subjective situations attributed by rules of conduct (or primary): the subjective right, as we have said, is the legal situation related to it in the legal relationship; the right to behave is, on the contrary, the opposite of the duty not to hold that behaviour (on the other hand, according to an axiom of deontic logic, the duty to behave implies the right to keep it). The subjective situations attributed by jurisdiction rules (or secondary) are more problematic than the duty; for example, those who believe that it is possible come to the effect that the rules that attribute powers are norms that impose duties that are indirectly formulated: attributing power to one person over another is tantamount to imposing on the latter the duty to observe the norms enacted from the first.

In addition to the juridical duty mentioned above, which refers to a juridical norm, one also speaks of a moral (or ethical) duty which has as its reference a moral norm. However, there is no agreement on the distinctive features between the two concepts, a reflection of the age-old question about the distinction between morality and law: there are those who distinguish legal and moral duties since the latter, unlike the former, would refer to divine law; others, on the other hand, believe that the moral duty has as direct reference the conscience, as an internal judge independent of canons and rules fixed from the outside; still others, following Hans Kelsen, reveal the distinctiveness between moral and juridical duty in the fact that only the violation of the second gives rise to the necessary application of a sanction.

Often moral duty and legal duty coincide, but it can also happen that a dutiful behaviour from the moral point of view is not from the legal point of view or even that legal duty and moral duty are in conflict with each other, in the sense that the behaviour conforming to one is different from the other. The personal choice not to fulfil the legal duty because contrary to a moral duty considered prevalent takes the name conscientious objection: only in exceptional cases the legal systems allow to invoke it in order not to incur the sanctions resulting from the non-observance of the duties imposed by their rules.

RESPONSIBILITY

The responsibility must be distinguished from simple immutability, understood as the attribution of a given behaviour to a particular person.

Responsibility presupposes a situation of freedom, in which the person can choose which behaviour to hold; if this choice was not possible, in fact, even if it were able to foresee the consequences of its actions, it could not in any case adopt a different behaviour in the light of its prediction. On the other hand, so that we can talk about responsibility, it is necessary that the person is in a situation of limited freedom, in which the behaviours that he can keep are not completely indifferent because, otherwise, there would be no reason to choose the one rather than the other based on the expected consequences.

From what has been said, a person can be said to be responsible for a state of affairs if the following conditions exist jointly:

- the state of things is a consequence of his behaviour;
- the person could have foreseen this certain or even probable consequence of his behaviour;
- the person, if desired, could behave differently, thus avoiding this consequence.

In a different sense, it is said that a person is responsible if, when he acts, he tries to predict the consequences of his actions and correct them accordingly.

We speak of legal responsibility when the situation of limited freedom derives from a juridical norm that imposes a juridical duty (understood in a broad sense, inclusive of the obligation), that is to hold or not to keep a determined behaviour. As a rule, to the

behaviour contrary to the norm (illicit) another norm reconnects a sanction, so in the legal sphere the responsibility can also be defined as the duty to submit to the sanction.
As the legal systems may have various categories of offense, in relation to the violated norm, the type of sanction that follows or the methods for its application, so will have as many types of responsibility: civil liability, criminal responsibility and so on.
Normally the subject on which the responsibility lies is the same person who committed the illicit act (direct responsibility); there can, however, be cases in which the system considers a subject responsible for the offense committed by another, by virtue of a certain relationship between the two: we speak, then, of indirect responsibility. A kind of indirect responsibility is the collective responsibility, which is when all the members of a community are held responsible for the wrongdoing committed by one or some of them; typical of primitive systems, it survives in international law (think of war or reprisal).

RIGHTS

The idea of right is quite old, the first historical source comes from five thousand years ago. They said that the King of Ur created what is thought to be the first legal code roughly in the year 2050 BC. Numerous other legislative bodies were created in Mesopotamia including the Code of Hammurabi, (about 1780 BC) which is one of the best preserved examples of this type of documents. It showed the laws and punishments resulting from the infringement of laws on a vast number of problems including women's rights, children's rights and the rights of slaves; a similar and in some ways more evolved legislative body (considered by many scholars, dependent or derivative) is that contained in the books of Exodus, Leviticus, Numbers and Deuteronomy of the Hebrew Bible.

The notion of minimum rights related only to the quality of a human being, the so-called natural rights, is very old and also very general. What characterizes the idea of human rights is the fact of explicitly inscribing them in law (oral or written), of recognizing their universal application and a force superior to any other norm.

Among the first to address the issue from a speculative point of view, are perhaps the Greek philosophers, in particular Aristotle and the Stoics, who affirm the existence of a natural right, that is a set of rules of behaviour whose essence man draws from the study

of natural laws. This thought, called jusnaturalism, has very ancient origins, and is often divided into various historical sections. The ancient naturalism can be summarized in the thought of the great Greek philosopher expressed in his Nicomachean Ethics.

In practice, the concept of human rights is dealt with historically for the first time in the sixth century BC. from Cyrus the Great, sovereign of the Persian Empire (current Iran). After the conquest of Babylon (current Iraq) in 539 B.C., the king had the text carved on the "Cyrus cylinder". This document is currently mentioned as the "first charter of human rights" because it expresses respect for man as such and promotes an elementary form of religious freedom and tolerance. Cyrus essentially declared that the citizens of the Empire were free to demonstrate their religious beliefs and, moreover, abolished slavery by favouring the return of the deported peoples to their lands of origin.

In ancient Rome there existed the notion of the right of citizenship that was essentially a set of rights reserved for all Roman citizens.

In the 3rd century BC, during the reign of Aśoka the Great of the Maurya Empire (today India), unprecedented civil rights were established. After the bloody conquest of the kingdom of Kalinga, around 265 BCE, Aśoka repented of acts committed in war and converted to Buddhism. Since then the one who was first described as "the cruel Aśoka" was known as "the pious Aśoka". During his reign he pursued a policy of nonviolence (ahimsa) and respect for animal life (for example forms of killing or unnecessary mutilation of animals, such as hunting for fun and religious sacrifices or castration, were immediately abolished) . He treated his subjects as equals regardless of their religion, caste or political activity, built hospitals and universities by offering services to all citizens free of charge, he defined the principles of non-violence, religious tolerance, obedience to parents, respect for teachers and priests, humanity towards servants (slavery did not exist in India at the time), generosity towards others, benevolence towards the guilty. All these reforms are described in the Edicts of Aśoka, a collection of 33 inscriptions on the so-called Pillars of Aśoka.

However, in all ancient societies the principles of human rights have been set in religious texts. The Hindu Vedas, the Jewish Tanàkh, the Christian Bible, the Islamic Qur'an and the Confucian Analecta are among the most ancient writings that deal with the question of the rights and duties of man and his responsibilities.

In the thirteenth century, scholastic naturalism, which had as its greatest exponent another philosopher, Thomas Aquinas, describes natural rights as a "set of first ethical principles, very general" that condition the legislator in positive law, as a seal of God in the creation of things. Human rights are therefore no longer a set of things more or less benevolently granted by some authority. It is the right of man to claim his freedom as his natural right.

In 1215 the King of England John Lackland (John Senzaterra) was forced by the barons of the kingdom to grant, signing it, the Magna Charta Libertatum (Charter of liberties). It represents the first fundamental document for the granting of rights to citizens because it requires the king to respect certain procedures, limiting his sovereign will by law.

At the end of the year 1222, on the day of the coronation of Sundjata Keïta as ruler of the Malian Empire, the Manden Charter was solemnly proclaimed and handed down, a declaration of essential human rights such as the right to life and the right to freedom. The Manden Charter addresses the "four corners of the world" with seven statements:

- «Every life is a life»
- «The wrong requires a repair»
- «Help each other»
- «Vigil on the fatherland»
- «Fight servitude and hunger»
- «That the torments of war cease»
- «Anyone is free to say, to do and to see»

The themes that will be treated centuries later in the West in human rights declarations are found in this paper: respect for human life and the freedom of the individual, justice and equity, solidarity. Taking a stand against slavery, which has become a current in West

Africa, the card identifies the violence of the causes as a precedent to the violence of war. The abolition of slavery was probably the great merit of Sundjata Keïta. The Manden Charter can probably be considered as one of the first declarations of human rights.

In 1524 from the meeting between the philosopher Las Casas and Charles V were born the "new laws" that proclaimed:

- the natural freedom of the natives and the liberation of slaves
- freedom of work, which limits the corvee and abolishes the fishing of pearls
- the freedom of residence and the free possession of property, up to the punishment of those who will be violent or aggressive towards the natives
- the abolition of the system of the encomienda, consisting in entrusting to Spanish encomenderos certain inhabited territories with, "supplied", a group of indigenous people, who had to be colonized and Christianized, with absolute freedom of government.

The revolts and anarchy that followed in the Spanish colonies of the New World led to the repeal of these laws in favour of indiscriminate conquest.

The first declaration of modern human rights is that of the State of Virginia (USA), written by George Mason and adopted by the Virginia Convention on 12 June 1776. This was widely copied by Thomas Jefferson for the declaration of the rights of the 'man contained in the Declaration of Independence of the United States of America (July 4, 1776) which states "that all men are created equal to each other, that they are endowed by their creator of some inalienable rights including life, freedom and the pursuit of happiness ".

Be that as it may, the first and true formal human rights card was established in 1789 by the French Revolution, is known as the Declaration of Human and Citizen Rights and is characterized by a more abstract approach than the previous American.

It was then Napoleon Bonaparte who exported the concept of human rights in the other countries of Europe, even if in reality they were denied them. Therefore, a real diffusion

of the same occurred only after the revolts of 1848 and the consequent proclamation of the first liberal constitutions in the various European countries.

During the twentieth century in Western Europe and North America many groups and movements succeeded in achieving profound social changes in the name of human rights, creating a rapid improvement in the living conditions of the so-called Western people.

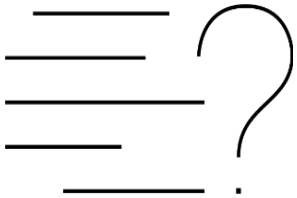
A further great affirmation of human rights occurred after the end of the Second World War with the establishment of the United Nations Organization (UN) and with the drafting of the Universal Declaration of Human Rights, signed in Paris on 10 December 1948.

THE INTERNATIONAL DECLARATION ON HUMAN RIGHTS

With this, for the first time in modern history, the Charter established the universality of these rights, no longer limited only to Western countries, but addressed to the peoples of the whole world, and based on a concept of intrinsic, inalienable, and universal human dignity. The Declaration recognizes among other things the right to life, liberty and personal security; to recognition as a person and to equality before the law; to specific guarantees in the criminal process; freedom of movement and emigration; kindergarten; to nationality; to the property; freedom of thought, conscience and religion; freedom of association, opinion and expression; to social security; to work under just and favourable conditions and to freedom of trade union; at an appropriate level of life and education.

It constituted the ideal horizon of the Charter of Fundamental Rights of the European Union, then merged in 2004 into the European Constitution. The text of the European Constitution has never entered into force due to its non-ratification by some Member States (France and the Netherlands following the majority of the no to the referendum), but the European Declaration is nevertheless a source of inspiration for the Charter of Fundamental Rights of the European Union proclaimed for the first time in Nice on 7 December 2000, and today also having full binding legal value for EU countries after the entry into force of the Lisbon Treaty on 1 December 2009 [4] Charter of fundamental rights of the European Union as an integral part of the European Constitution.

CONTROL QUESTIONS



1. *What is a right?* The right is a faculty guaranteed by the ordering of each person or organization.

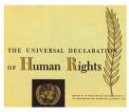
2. *What is an obligation?* Obligation indicates a behaviour imposed by a norm that can be of different nature: legal, moral, religious obligation.

3. *What does responsibility* mean*?* Responsibility means the possibility of predicting the consequences of one's behaviour and correcting it on the basis of this forecast.

4. *What are human rights?* Human rights represent the inalienable rights that every human being possesses as such.

5. *Are rights, obligations and responsibility connected? How?* Yes, they are. Rights and obligations are often considered the two sides of the same coin. Often someone's right is someone else's duty. Responsibility in this dialectical relationship is the synthesis.

ELECTRONIC VERSION

SLIDES	NOTES
SOCIAL RESPONSIBILITIES AND RIGHTS IN THE DIGITAL ERA **Obligations, responsibilities and rights**	
"All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and must act towards one another in a spirit of brotherhood." Universal Declaration of Human Rights.  	
Responsibilities, rights and obligations today Which obligations, responsibilities and rights are needed in order to become active citizens in the contemporary society? 	

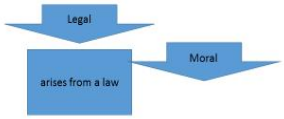
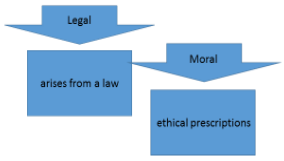
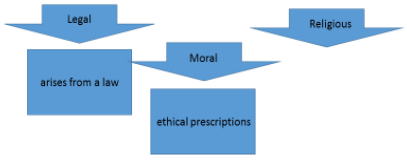
What is an obligation

The term obligation comes from the latin ob-ligare that means to tie to something.

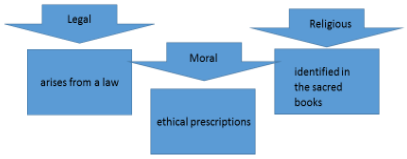
It indicates a behavior imposed by a norm that can be of different nature: legal, moral, religious obligation …

Different type of norms

Different type of norms

Different type of norms 	
Different type of norms 	
Different type of norms 	
Different type of norms 	

Different type of norms



What is responsability

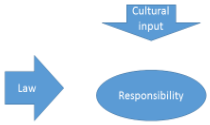
Responsibility is a word made up of 'response' and 'ability', ability to give answers in relation to one's actions.

Nicola Abbagnano (2013) defines it as "the possibility of predicting the consequences of one's behavior and correcting it on the basis of this forecast"

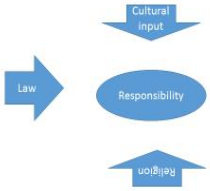
Influences on responsibility concept

Influences on responsibility

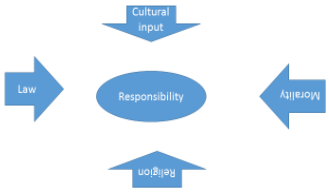
Influences on responsibility



Influences on responsibility



Influences on responsibility



What is a right

The right is a faculty guaranteed by the ordering to each person or organization. The right we speak of are those identified as subjective or individual rights.

They identify individual powers or possibilities in social and group action. They are strictly connected but separated by the idea of law.

Aristotele said that...

"Of the civil right a part is of natural origin, another is founded on the law. Natural is the right that maintains the same effect everywhere and does not depend on whether one looks good or not; founded on the law it is the other one".

Different type of rights

There are different types of rights: the right to do something, the right not to do something and the right to have something according to one's will.

International declaration on Human Rights

The Universal Declaration of Human Rights is a document on the rights of the person adopted by the General Assembly of the United Nations on December 10, 1948.

Human rights represent the inalienable rights that every human being possesses as such.

Rights, obligations and responsibility: a dialectical relationship

Rights and obligations are often considered the two sides of the same coin.

Both have this characteristic of being linked to three manifestations: to do, not to do, to be able to do.

Responsibility in this dialectical relationship is the synthesis.

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. The term obligare means?

a) to put together
b) **to tie to something**
c) to cut something
d) to strangle

2. The norm imposing the obligation cannot be:

a) Legal
b) Moral
c) Religious
d) **Foreign**

3. **Responsibility means:**
    a) **Ability to give an answer**
    b) Ability to respect
    c) Ability to predict future
    d) Ability to rest

4. **Responsibility is:**
    a) Only a legal issue
    b) Only a religious issue
    c) Only a moral issue
    d) **A legal, moral and religious issue**

5. **The Universal Declaration of Human Rights is a document adopted by:**
    a) **the General Assembly of the United Nations**
    b) the NATO council
    c) the European Union Parliament
    d) the World Trade Organization

6. **The Universal Declaration of Human Rights was adopted in**:
    a) 2000
    b) 1995
    c) **1948**
    d) 1918

7. **Human rights represent:**
    a) a general moral frame
    b) a law enforced set of rights
    c) an international best practices list
    d) **the inalienable rights that every human being possesses as such**

8. **Rights and obligations are often considered:**
    a) the opposites
    b) **the two sides of the same coin**
    c) the same thing
    d) irreconcilable elements

9. **Which is not a type of right?**
    a) the right to do something
    b) the right not to do something
    c) **the right to impose one's will over another**
    d) the right to have something according to one's will

10. **Aristoteles said that rights are based on:**
    a) **Nature and law**
    b) Power and will
    c) Nature and religion
    d) Society and policy

TRUE – OR – FALSE SENTENCES

1. The term obligation comes from Latin. **TRUE**
2. Obligation indicates a behaviour freely adopted. **FALSE**
3. Responsibility is a word made up of 'response' and 'ability', ability to give answers in relation to one's actions. **TRUE**
4. Responsibility has nothing to do with the possibility to predict the consequences of one's behaviour. **FALSE**
5. The concept of responsibility has a strong cultural nature and derives from the vision that a civilization has of the world. **TRUE**
6. They are strictly connected but separated by the idea of law. **TRUE**
7. There is just one type of rights: the right to do something. **FALSE**
8. Human rights represent the inalienable rights that every human being possesses as such. **TRUE**
9. The Universal Declaration of Human Rights was adopted by the General Assembly of the United Nations in 2000. **FALSE**
10. Rights and obligations are often considered the opposites. **FALSE**

OPEN – END QUESTIONS

1. What is a right? (*The right is a faculty guaranteed by the ordering of each person or organization.*)
2. What is an obligation? (*An obligation indicates a behaviour imposed by a norm that can be of different nature: legal, moral, religious obligation*.)
3. What does responsibility mean? (*Responsibility means the possibility of predicting the consequences of one's behaviour and correcting it on the basis of this forecast.*)
4. What are human rights? (*Human rights represent the inalienable rights that every human being possesses as such.*)
5. Are rights, obligations and responsibility connected? How? (*Yes, they depend on each other*.)

OPEN – END SENTENCES

1. It indicates a behaviour imposed by a norm that can be of different nature … (*legal, moral, and religious*).
2. Responsibility is a word made up of … (*'response' and 'ability'*).
3. Human rights represent … (*the inalienable rights that every human being possesses as such*).
4. Rights and obligations are often considered … (*the two sides of the same coin*).
5. There are different types of rights … (*the right to do something, the right not to do something and the right to have something according to one's will*).

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what social responsibility and rights are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. To be active and aware citizens it is mandatory to have a clear overview of what responsibilities and rights are both on a theoretical and practical level.
4. The difference between the different types of duties, the moral value of responsibility and the relevance of rights are fundamental concepts today.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be the open discussion:
    - the teacher presents the topic with a short intro;
    - divides the class into groups of four-five pupils;
    - assigns the task to elaborate verbally the topic explicating own thought and/or find concrete examples;
    - close with a moment of comparison and restitution to the class of the single group's work.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. The last slide contains the explanation for the guided discussion, it is up to the choice of the teacher to use it or not.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) for each sub-module, ninety for the whole module 2. They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**OBLIGATIONS, RESPONSIBILITIES AND RIGHTS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to : • what obligations, responsibilities and rights; • the interconnection between rights, obligations and responsibilities.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector.
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• ethic • rights • obligations

PART II: Description of the lesson

Activity one: PPT presentation

Procedure: The teacher shows the power point and explains the concepts.

Interaction: T-Ss

Time to be allocated: 20 min.

Activity two: Group work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to read the first five articles of the Universal declaration of Human Rights (here it is possible to find the full text translated in more than 500 languages) and discuss about: what are they about, find ten key words, think about a situation of not respect of human rights in our society or in our world today.
Interaction: T-Ss, Ss –T, Ss-Ss
Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialog to understand which topic has had more impact on the students.
Interaction: T-Ss, Ss –T
Time to be allocated: 10 min

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

B. THE BALANCE OF RIGHTS AND RESPONSIBILITIES

TEACHING OBJECTIVES

Thanks to this module, pupils will learn how rights and responsibilities are strictly connected as the rights of someone are usually the responsibilities of someone else. This module wants to offer an overview on the interconnection between rights and responsibilities. Everybody has rights and also responsibilities but what happens if one neglects one side?

CIVIL RIGHTS IN THE EU

On the occasion of the fiftieth anniversary of the Universal Declaration of Human Rights, celebrated in December 1998, the Cologne European Council (3-4 June 1999) decided to start work on the drafting of a Charter of Fundamental Rights. In this way, we wanted to collect the fundamental rights in force at Union level in a single text, in order to give them greater visibility. The Charter is based on the EU Treaties, on international conventions, including the European Convention on Human Rights of 1950 and the European Social Charter of 1989, on the constitutional traditions common to the Member States, as well as on the various declarations of the European Parliament.

The elaboration was entrusted to a special assembly - which decided to give itself the name of the Convention - made up of 62 members, including representatives of the governments of the member states, the president of the European Commission, the European Parliament and national parliaments. Four observers representing the Court of Justice of the European Communities (ECJ), the Council of Europe and the European Court of Human Rights were also present at the meeting.

The Charter establishes fundamental rights in terms of dignity, freedom, equality, solidarity, citizenship and justice. The Charter, approved by the European Parliament on 14 November 2000 and by the Commission on 6 December 2000, was solemnly proclaimed at the Nice European Council (7-10 December 2000).

The Intergovernmental Conference (IGC), which ended on the occasion of the European Council itself, failed to reach an agreement on the integration of the Charter into the Treaties, in order to make it legally binding. The Court of Justice of the European Communities, however, stated that it wanted to base itself on the Charter as a guide in the drafting of its sentences. The Laeken European Council mandated the European Convention to study the possibility of integrating the Charter into existing treaties.

Although lacking binding legal value, the document - which represents the lowest common denominator of the various constitutional traditions - thus marks an essential turning point in the European Union's policy, originally oriented to address mainly economic issues.

It accepts, in principle, the rights enshrined in the Universal Declaration of Human Rights of 1948 and those enunciated in the European Convention for the Protection of Human Rights and Fundamental Freedoms of 1950, with the addition of some "new rights "as requested by the European Parliament. It takes up the traditional distinction between civil and political rights and economic and social rights, already formulated in the United Nations International Pacts of 1966. The distinction rests essentially on the recognition of an immediate applicability (before a court) of civil and political rights (law of speech, of vote, of association) in contrast with the not immediate applicability of economic and social rights (right to strike, right to work, right to education) .The Charter also incorporates indirect rights, is those deriving from the Treaties, the Conventions, the Community Charters and the rights recognized by the jurisprudence of the Court of Justice of the European Communities and the European Charter of Human Rights, so that the Community institutions and the Member States can interpret the legislation Community in the light of the provisions contained therein.

The rights are grouped into six chapters on dignity, freedom, equality, solidarity, citizenship and justice. A final part contains the provisions relating to the sphere of application of the Charter and a c.d. clause safeguard (Article 53), aimed at recognizing the prevalence of international or national legislation if more favourable than that foreseen by the Nice document. As regards the definition of "new rights", the Charter incorporates principles developed within the United Nations and the Council of Europe. In the field of biology and medicine, for example, there is a right to informed consent as well as a ban

on the commercialization of the human body and its parts, the prohibition of cloning and biogenetic practices (Article 3).

The right to the protection of personal data is also included (Article 8), the result of electronic progress and globalization, that of freedom of enterprise (Article 16) which has never before been contemplated in international acts. There are no particular innovations in the field of asylum law (Article 18), but is definitively provided for in art. 19 the prohibition against returning the foreigner to the country in which he is the object of persecution.

Some articles of the Charter have a singular interest in the delicacy of the principles enunciated: the principle of non-discrimination to be applied also in the case of diversity of sexual orientations (Article 21), the principle of religious freedom and that of education (Article 10 and 14), to be given according to the religious convictions of the parents. On the basis of the principle of proportionality (Article 52), the Charter permits limitations on the exercise of rights and freedoms in the cases provided for by law, provided that their content is respected and only in those cases where such limitations are necessary for fulfilling important in the general interest recognized by the Union or the need to protect the rights and freedoms of others.

The Charter is therefore a very important political document and, above all, preliminary to the choices on the future of the European Union that divides those who wish to draft a true European Constitution, with their fundamental rights and institutions with full democratic legitimacy and who, instead, privileges the protection of the sovereignty of States.

The Treaty of Amsterdam marks a giant step in the defence of fundamental rights. It establishes a mechanism for the suspension of the rights of the Member State that violates these principles. Also in Amsterdam it was decided to extend the principle of non-discrimination by applying it, in addition to citizenship, to gender, race, religion, age and sexual tendencies; and we also wanted to strengthen the principle of equality between men and women. Lastly, the Amsterdam Treaty improves the Union's transparency policy and the conditions for access to official documents of the European institutions.

The European Union's commitment to the rights of its citizens was confirmed in Nice in December 2000 with the solemn proclamation of the Charter of Fundamental Rights of the European Union. The Charter elaborated a Convention composed of European and national parliamentarians, representatives of national governments and a member of the Commission. It consists of seven chapters - Dignity, Libertá, Equality, Solidarity, Citizenship, Justice - and 54 articles marking the fundamental values of the European Union and the civil, political, economic and social rights of its citizens.

The first articles concern human dignity, the right to life, the integrity of the person, the freedom of expression and conscience. The "Solidarity" chapter is an innovation as it brings together economic and social rights such as:

- the right to strike; the right to information and consultation of workers;
- the right to reconcile family and professional life;
- the right to protection of health, social security and social assistance.

The Charter promotes equality between men and women and introduces rights such as data protection, the prohibition of eugenic practices and reproductive cloning of human beings, the protection of the environment, the rights of the child and the elderly, the right to good administration. The Europe of the citizens prefigures some form of political Europe whose exact nature is however to be defined: what values in fact, and what ambitions the peoples of Europe are willing to share in a European Union of at least 25 members? The Treaty on European Union, as amended in Amsterdam, provides that the Union respects the fundamental rights guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms, signed in Rome on 4 November 1950, and which are from the common constitutional traditions of the Member States.

The Treaty of Amsterdam allows the Council to sanction a Member State by suspending certain rights deriving from the treaty, including the right to vote, for a serious and persistent violation of fundamental rights, but does not include any device to prevent infringements of fundamental rights. The Treaty of Nice provides that the Council, acting by a majority of four fifths of its members, after obtaining the assent of the European Parliament and having heard the Member State concerned, can establish the existence of a clear risk of serious infringement by a Member State of the fundamental rights and

freedoms on which the Union is founded. The Council may therefore decide to send the appropriate recommendations to that State. The right of initiative belongs to one third of the States, to the Commission or to the European Parliament.

CIVIL RESPONSIBILITY

Dr Simona Baggiani states that "responsible citizenship" and the concept of closely linked citizenship education are to a certain extent based on the definitions established by the Council of Europe in the context of its project on Education for a democratic citizenship. As a starting point, "citizens" can be considered as "people coexisting in a society".

The notion of "responsible citizenship" raises issues related to conscience and the knowledge of rights and duties. It is also clearly linked to civic values such as democracy and human rights, equality, participation, cooperation, social cohesion, solidarity, tolerance of diversity and social justice. The concept of "responsible citizenship" has been growing ever more since a number of specific recommendations and resolutions were adopted by the member states of the Council of Europe to promote this issue. The European Commission has also published white papers and some studies on this subject, which has now become a priority theme for many European countries.

For full civil responsibility it is necessary to have a good political culture, a critical thought, and active participation. The translation of the term "citizenship" into national languages does not necessarily produce an equivalent term referring to the role of citizens in a society in which they coexist with others. In some countries and depending on the context, the translated term can evoke either a legal status or a social role whereas in other languages these dimensions are not significant or do not exist. In the national language of many countries, the term "citizenship" only expresses the legal relationship between the citizen and the state.

Generally, it can therefore be said that "responsible citizenship" concerns matters related to the knowledge and exercise of civic rights and responsibilities. All European countries also associate the concept with certain values closely linked to being a responsible citizen.

These values include democracy, human dignity, freedom, respect for human rights, tolerance, equality, and respect for the law, social justice, solidarity, responsibility, loyalty, cooperation, and participation, spiritual, moral, cultural, mental and physical development. In spite of the fact that certain countries give more or less importance to these notions, it is generally agreed that they all contribute to the global understanding of the concept and its implementation. Almost all countries refer to their constitution or other specific documents on education (curriculum, education laws, and other official documents) as sources that best express their notion of "responsible citizenship".

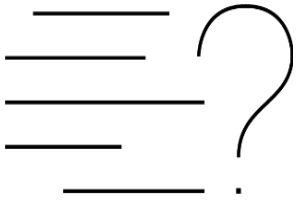
DIGITAL ERA AND CIVIL RIGHTS

Speaking about the digital era and civil rights it would be unfair to not mention Ziccardi (2012). In his book he points to the potential of computers guaranteeing democracy. In particular he says that “the idea that computers might not only assist humans, but might also allow the most complete expansion possible of intellectual and cognitive capacities and the widest and most transparent diffusion of information useful for progress and democracy, first took root in the theories of the protest movements that flourished in North America in the 1960s and, in particular, formed the basis of the ideas of, among others, Lee Felsenstein, the Free Speech Movement and the first California homebrew computer clubs [...] The motto ´a computer for all`, and the urgency that those early intellectuals felt regarding the development and penetration of inexpensive, mass-market computers that could be easily accessible to everyone were the theories that, for the first time, focused consideration on the radical idea that technology might, in fact, improve the world.”

Zaccardi continues showing how the ICT are fundamental in civil rights claiming process, for instance in Iran, as he describes: “The U.S. State Department too reportedly asked Twitter to delay some scheduled maintenance in order to allow Iranians to communicate as the protests grew more powerful technologies are also powerful : since they put into the hands of individuals, who wish to or who need to speak out, truly formidable resources, especially in those realities where the media are, as often happens, state-owned or controlled. Sartor, inter alia, is quite clear about the power of technology in political frameworks and its capacities to create a new public sphere. Information and

communication technologies (and, in particular, the Internet) have enabled the formation of a new public sphere, where individuals merge their opinions and build social knowledge in a variety of ways”.

CONTROL QUESTIONS



1. *How are rights and responsibilities connected?* Rights and responsibilities are strictly connected as the rights of someone are usually the responsibilities of someone else.

2. *Which is the difference between civil rights and human rights?* Civil rights are those rights guaranteed by the law of a given state and are distinguished from human rights, which alone are considered universal attributions without regard to citizenship or national law.

3. *Please name the seven chapters of the European Union Charter of Fundamental Rights.* Dignity, Freedom, Equality, Solidarity, Citizenship, Justice

4. *What does civil responsibility mean?* Civil responsibility means first of all being aware of their own rights, to make them respect, and their own duties, to respect them.

5. *Why are social media relevant for civil rights?* Social media are a very powerful tool especially in the hands of those individuals who need to raise their voices to be heard in those countries where mass media are controlled or owned by the state or political and financial elites.

ELECTRONIC VERSION

SLIDES	NOTES
ERASMUS+ SOCIAL RESPONSIBILITIES AND RIGHTS IN THE DIGITAL ERA **The balance between rights and responsibilities**	
ERASMUS+ Responsibility, rights and freedom 	
ERASMUS+ Civil rights Civil rights are those rights guaranteed by the law of a given state and are distinguished from human rights, which alone are considered universal attributions without regard to citizenship or national law. 	

EU Charter of Rights

The European Union's commitment to the rights of its citizens manifests itself in the Charter of Fundamental Rights of the European Union.

EU Charter of Rights

https://multimedia.europarl.europa.eu/en/history-eu-charter-of-fundamental-rights_V001-0025_ev

Civil responsibility

Civil responsibility means first of all being aware of one's own rights (and to have them respected), as well as one's own duties (and to respect them).

PARVANA´S STORY

The story tells of the young Parvan, an 11-year-old girl who lives in Kabul, in a Taliban-controlled region of Afghanistan...

Class activity explanation

Now:

- divide the class in groups of about four-five students – 2 min.
- the task of ech group is to think abouthow civil rights can be different in different countries and how rights can change suddenly with the advent of regimes that limit freedom – 20 min.
- confrontation of groups results – 10 min.

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Civil rights are those rights guaranteed by:

a) The European Union
b) **The law of a given state**
c) International treaties
d) National constitution

2. Civil rights…

a) are limited to citizens and their relatives
b) can never be extended to non-citizens
c) are automatically extended to non-citizens who are within the territorial boundaries of a state
d) **can be extended by law to non-citizens who are within the territorial boundaries of a state**

3. **There is not a charter of Fundamental Rights of the European Union named:**
    a) Dignity
    b) Freedom
    c) Solidarity
    d) **Peace**

4. **How many are the chapters of the Fundamental Rights of the European Union declaration…**
    a) four
    b) **seven**
    c) nine
    d) three

5. **The first articles concern:**
    a) the importance of stay together as union of States
    b) **human dignity, the right to life, the integrity of the person, the freedom of expression and conscience**
    c) rules of function of the European Union
    d) very general principles of tolerance, peace, freedom, justice

6. **The "Solidarity" chapter contains the innovation to:**
    a) **bring together economic and social rights**
    b) recognize the predominance of professional life over family
    c) speak not about social security
    d) declare the abolition of slavery

7. **Civil responsibility is not:**
    a) Be aware of own rights
    b) **Independent form the ability to response**
    c) Linked to civic values
    d) Connected with a good political culture

8. **For a full civil responsibility it is not necessary to have:**
    a) a good political culture
    b) a critical thought
    c) an active participation
    d) **an high comprehension of digital era**

9. **ICT has proved to be particularly valuable in authoritarian states?**
    a) Give an access to the market
    b) Support democratic processes
    c) **guaranteeing civil rights**
    d) provide true news

10. **Social media create a new political sphere that is a virtual space in which people cannot**:
    a) **have more democratic election**
    b) meet
    c) exchange ideas, information and opinions
    d) build social knowledge

TRUE – OR – FALSE SENTENCES

1. Civil rights and human rights are the same. **FALSE**
2. Civil rights can be extended by law to non-citizens. **TRUE**
3. The Fundamental Rights of the European Union declaration consists of four chapters. **FALSE**
4. The Fundamental Rights of the European Union declaration speaks about Dignity, Freedom, Equality, Solidarity, Citizenship, and Justice. **TRUE**
5. The "Solidarity" chapter has no innovative content. **FALSE**
6. The right to strike is one of the EU fundamental rights. **TRUE**
7. Civil responsibility means first of all being aware of your own rights. **TRUE**
8. Civil responsibility is not linked to the civil values of a society. **FALSE**
9. Computers offer progress, well-being and democracy. **TRUE**
10. In terms of guaranteeing civil rights ICT has proved to be particularly valueless. **FALSE**

OPEN – END QUESTIONS

1. How are rights and responsibilities connected? (*Rights and responsibilities are strictly connected as the rights of someone are usually the responsibilities of someone else.)*
2. Which is the difference between civil rights and human rights? (*Civil rights are those rights guaranteed by the law of a given state and are distinguished from human rights, which alone are considered universal attributions without regard to citizenship or national law.*)
3. Please name the seven chapters of the European Union Charter of Fundamental Rights. (*Dignity, Freedom, Equality, Solidarity, Citizenship, Justice*)
4. What does civil responsibilityit mean? (*Civil responsibility means first of all being aware of one's own rights, to make them respect, and their own duties, to respect them*.)
5. Why are social media relevant for civil rights? (*Social media are a very powerful tool especially in the hands of those individuals who need to raise their voices to be heard in those countries where mass media are controlled or owned by the state or political and financial elites.*)

OPEN – END SENTENCES

1. Civil rights are those rights guaranteed … (*by the law of a given state*).
2. The Fundamental Rights of the European Union has seven chapters/topics … (*Dignity, Freedom, Equality, Solidarity, Citizenship, and Justice*).
3. The "Solidarity" chapter is an innovation as it brings together … (*economic and social rights*).
4. Civil responsibility means first of all … (*being aware of your own rights*).
5. Social media in general is a very powerful tool especially in the hands of those individuals who need … (*to raise their voices to be heard in those countries where mass media are controlled*).

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what social responsibility and rights there are.
2. To be active and aware citizens it is mandatory to have a clear overview of what responsibilities and rights are both on a theoretical and practical level.
3. The difference between the different types of duties, the moral value of responsibility and the relevance of rights are fundamental concepts today.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide.: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.
6. For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**THE BALANCE OF RIGHTS AND RESPONSIBILITIES**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to : • the interconnection between rights and responsibilities.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector.
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• responsibilities • rights • obligations

PART II: Description of the lesson

Activity one: PPT presentation

Procedure: The teacher shows the powerpoint and explains the concepts, including the trailer of Breadwinner (clicking on the title “Parvana´s story”).

Interaction: T-Ss

Time to be allocated: 20 min.

Activity two: Group – work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to discuss how civil rights can be different in different countries and how rights can change suddenly with the advent of regimes that limit freedom.

Interaction: T-Ss, Ss –T, Ss-Ss
Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialog to understand how the story and the discussion have stimulated a deeper understanding of the topic.

Interaction: T-Ss, Ss –T
Time to be allocated: 10 min.

Additional activity: watch the full film “The breadwinner”.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils’ lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

C. PRIORITY OF RIGHTS AND OBLIGATIONS IN THE DIGITAL ERA

TEACHING OBJECTIVES

This module aims to understand that rights and obligations are the twin faces of the same medal and to show that to know when one should be predominant we need ethics.

WHAT IS ETHIC AND ITS HISTORY?

The philosopher Carlo Clericetti presents the history of ethics considering how the reflection around the principles that must guide human actions is one of the fundamental problems of the history of thought. Always struggling are two strands, variously interpreted: one is the one that seeks these principles in an external source and above, the other that believes instead that are born on earth.

"Ethics" is today a term widely used both as a noun and as an adjective (for example "laic ethics", or "business ethics", but also "ethical business", "ethical finance", "ethical code" and so on). Everyone knows more or less what it means, perhaps those who are conscious of the fact that this word indicates one of the two or three fundamental problems of the whole history of thought are a little less.

The term was introduced in philosophical language by Aristotle and derives from a Greek word that means "behaviour, costume". It is the reflection around the practical behaviour of man, the principles that must guide him and the problem of where to draw these principles.

Precisely on this last point since the birth of the discussion there have been two opposing and irreconcilable strands. One believes that these principles derive from a transcendent source (gods, religion, the universal of Socrates or the absolute Kantian imperative, for example). The other person who instead seeks on earth the bases on which to build, since the Sophists showed that Truth with a capital "V" is an illusion.

The radical difference between these two positions is evident. If ethics derives from a source superior to man, the problem is to try to understand how from this source we can draw a guide to behaviour that is not subject to opinions and that is not susceptible to changes. If instead ethics is placed by man, man can also change it, it is he who decides,

even forcing what would seem "natural". He is the man who makes the law, does not receive it from someone else, who is on Mount Sinai or can be identified with complex constructions of thought.

Between these two currents always in struggle moves the whole history of philosophy, with mutual contamination also of great importance. Socrates, for example, although belonging to the first current, can be defined in some way as "terrain". Its central concept is that those who know the good do it; whoever behaves differently does not do it because he is "bad" or because he chooses another path, but out of ignorance of what the true good is. Plato's Idea, on the other hand, is - and must be - totally detached from the world, the realm of fallacy, and perfection consists in the contemplation of Ideas.

But what is it that pushes philosophers to deal with finding the rules of human behaviour? The need to seek the truth, the need for intellectual speculation, of course. But also social transformations, points of discontinuity in history. When a system of life goes into crisis, the shared value system that it had created is also shaking, and the search for new parameters is becoming more urgent. Socrates and the sophists, the first to systematically place the question, live in a society in transformation, where a new ruling class that draws its power above all from trade is replacing the nobility by birth right made above all of landowners.

The Sophists are the expression of this society in movement: no unchanging principles, ethics is a set of rules that must make society work well. They are the first relativists.
Aristotle, on the other hand, will not be. It will come down from the Hyperuranium, but it will appeal to human nature, to the rules that belong "naturally" to the human being.
But how can we be sure of the existence of these rules and their correct interpretation, if not with what we could eventually define an "act of faith"? One can base ethics on nature, but nature is no longer easily knowable of "true good". Many others will be the philosophers who will choose to found ethics on nature, in fact, but with different solutions and results.
Even the Christian ethic, moreover, which also has a God as the first instance from which to derive its foundations, when it goes beyond the great general prescriptions ("love one

another as brothers, forgive, be perfect as 'God is perfect') varies greatly in space and time, and for a short period will resolve many ethical-theological disputes by entrusting the definitive word to the stake.

The problems of ethics are intertwined with those of law, which is up to set in practice rules the ways of behaviour considered fair and desirable. The problem of "natural law „that is - again - deriving from nature goes through the whole modern age. But the problem does not change: nature is different depending on who observes it. If it is good for the hedonists, then many centuries later for the Dutch jurist Ugo Grozio (Hugo de Groot, around 1600), nature is above all positive laws and said independent principles also by God, which are essentially: the refraining from the things of others, the return of the goods of others and the profit derived from them, the obligation to keep promises, compensation for damage caused by fault and to be subject to penalties between men. Thomas Hobbes, on the other hand, will affirm that nature is above all the impulse to self-preservation, which determines man's behaviour and makes him hominy lupus, hostile to other men who could constitute a limit to that impulse. Only the rational calculation of advantage and security leads him to impose the "social contract". But even here we are faced with a petition of principle unprovable.

One step forward will be empiricism, which will instead seek to draw conclusions from what actually happens. Locke will start from the concepts of pleasure and pain, Hume from a research on the meaning that society gave to terms such as "good" or "right". But with Kant this process is blocked to return, from a certain point of view, even to Socrates. Because it is true that Kant shifts the problem from the opposition between nature and society to the relationship between ethics and history, giving a turning point that marks the beginning of modern reflection, but it is also true that according to the great German philosopher the act moral is "before" in history, it cannot be conditioned by it. Once again an "a priori", that is an act of faith.

Those who will come after him (Lessing, Schiller, Fichte, and Hegel, to name a few) will instead see this relationship - between ethics and history - as a development, a march towards progress. The Positivists will put the accent on the industrial society and the elaboration of the ethics starts from the belonging of the individual to it.

Around the middle of the nineteenth century, three German thinkers will submit to harsh criticism the very concept of ethics as it was intended up to then. Max Stirner will radically attack the liberal ethic, showing that those who refused that there were religious values at the base of ethics did nothing but replace another type of religion, that of Man, without much difference. Almost at the same time Karl Marx and Friedrich Engels start from Hegel and overthrow him, the Hegelian dialectic of the Spirit becomes dialectical materialism: relations between men derive from economic interests and from how production relations are organized, in essence they are power relations. The bourgeois morality, the laws, the organization of the state, are nothing more than "superstructures" useful to support and justify the domination of one class over the other: ethics is nothing but ideology, the "opium of people" religion.
It is the end of the "sacredness" of ethics, to which Freud will also contribute, seeking in the depths of motivations beyond the conscience the key to the behaviour of individuals. Shortly before Friedrick Nietzsche (who had read Stirner, as he himself put it) in the Genealogy of Morality will reduce the ethics of religious derivation to a negative fact, a reaction of the dominated to the vitalistic values of the ruling class, of which the priests appropriated purpose of power.

The thinkers closest to us will use conceptual tools that were once reserved for natural science scholars, and no one ever thinks of setting absolute principles at the basis of systemic constructions. It remains, of course, the ethics founded on religions - also that, however, influenced by the flow of history and change of customs - but in this case it does not make a problem that at the origin there is an act of faith, indeed, it is precisely this that is claimed.

But is a "secular" ethics possible and despite this acceptable and accepted?
Obviously yes. Ethics as a guide to the behaviour of individuals, groups and structures of society (such as companies, for example) can never be done without. A secular ethics will never be an absolute ethic, it will have to recognize that at its base there are principles.

WHY TEACH ETHIC TODAY

Yascha Benjamin Mounk (2014) of Harvard University says that “The important self-regarding, Other-regarding and societal reasons why we need to give responsibility a real role in our moral and political world. Building on these reasons, I sketch an institutional account of responsibility that helps to empower people to gain mastery over their own lives, and draw out this account’s implications for the design of political institutions, including the welfare state.”

The importance of ethic in the digital era is clearly explained by Floridi (2015) when he says “The deployment of information and communication technologies (ICTs) and their uptake by society radically affect the human condition, insofar as it modifies our relationships to ourselves, to others and to the world. The ever-increasing pervasiveness of ICTs shakes established reference frameworks through the following transformations:

- the blurring of the distinction between reality and virtuality;
- the blurring of the distinctions between human, machine and nature;
- the reversal from information scarcity to information abundance;
- the shift from the primacy of entities to the primacy of interactions.

The world is grasped by human minds through concepts: perception is necessarily mediated by concepts, as if they were the interfaces through which reality is experienced and interpreted. Concepts provide an understanding of surrounding realities and a means by which to apprehend them. However, the current conceptual toolbox is not fitted to address new ICT-related challenges and leads to negative projections about the future: we fear and reject what we fail to make sense of and give meaning to”. He goes on to say that “What seems to be lacking, in affluent societies, is the fundamental engagement with the human project: the increasing amount of leisure appears to find our culture unprepared. It is as if, having worked hard to gain the right to be on vacation, humanity

might then be uncritically unprepared to make the most of its most precious resource, time. Technologies are used to save time first, and then to kill it. So one of the pressing political questions that we are facing in advanced information societies is: what sort of human project are we working on?" Ethics helps us to understand exactly how to shape our life in a meaningful way.

PRACTICAL ETHIC

Practical ethics is the research field aiming at understanding how ordinary people make choices about how to act.

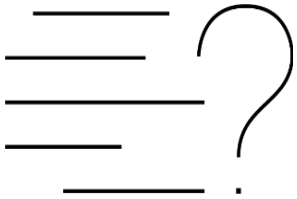
About this topic Elliot (2017) says that "Practical ethics includes the following:

1. Everyone wishes to avoid basic harms like pain, death, and disability for themselves and for those whom they care about;
2. If it is irrational to want to be caused a certain harm in a certain circumstance— that is, there is no good reason for someone wanting to be caused that harm—it is unethical to cause that harm to any other human being;
3. Everyone should be treated justly—they should get what they have a legal right to, what they have an ethical right to, what they deserve, and what they have been promised, and they should not be deprived of what others can get unless there is an ethically relevant justification;
4. People are ethically required to fulfil their role-related responsibilities and to do that without causing unjustified harm to anyone.

While people should strive to act in ethically ideal ways by promoting the good and giving extra consideration and care for the most vulnerable, it is ethically required that they do their jobs and do not cause unjustified harm. It is praiseworthy if they act in ethically ideal ways. They are blameworthy if they have failed to meet ethical requirements" and "the primary reason for setting questions for reflection is to strongly encourage the readers to reflect for themselves on the relevant ethical and epistemic principles, their application to the relevant issues and practices and the analysis and evaluation of those issues and practices by reference to illustrative case studies that the readers are also invited to

search and discover for themselves. As Aristotle, the ancient Greek philosopher would say, ethical learning, in this case, digital ethics as it applies to the media, comes through individual and group reflective practice and not just through the reading of articles and books on the topic. This book therefore encourages constructive self-learning through self- reflection as an effective and efficient way for becoming a reflective media practitioner."

CONTROL QUESTIONS



1. *How did Aristoteles define "ethic"?* "Ethics is that branch of philosophy that studies the conduct of human beings and the criteria by which behaviour and choices are evaluated."

2. *Which is a more generic definition of ethics*? Ethics is therefore a set of norms and values that regulate human behaviour by attributing a positive or negative judgment with respect to good and evil.

3. *Why are morality and ethics not the same thing?* Morality includes the set of norms that distinguish good and evil, while ethics corresponds to the speculative effort to understand how these moral norms have been produced.

4. *What is the difference between ethics and law?* Law is based on the coercive power of the state, while ethics is based on social control alone.

5. *What are the two branches of ethics?* Ethics is divided into theological and deontological.

ELECTRONIC VERSION

SLIDES	NOTES
SOCIAL RESPONSIBILITIES AND RIGHTS IN THE DIGITAL ERA **Priority of rights and obligations in the Digital Era**	
What is ethics? "*Ethics is that branch of philosophy that studies the conduct of human beings and the criteria by which behavior and choices are evaluated*". (Aristotle)	
Ethics and morality Ethics and morality are often used as synonyms, but they are not at all. ETHICS =/= MORALITY	
The field of ethics Ethics can be viewed as both a "normative institution" and a "social institution": · "**Institution**„ · "**Normative**" · "**Social**"	

Ethic and law

Ethics has a very close relationship with law, as both regulate interpersonal relationships between individuals and between individuals and society.

Ethics and responsibility

When we talk about good or bad, we can do it in **moral** or **non-moral** terms.

Ethics in digital era

Since the `80s has emerged a new discipline, called precisely the **ethics of the media**, has then given rise to other disciplinary sub-sectors such as **webethics**.

Ethics in practice

What is the hardest ethical decision you've ever had to make?

https://www.youtube.com/watch?v=dU7mbVU8FjI

Integrating Ethics: Ethical Decision-Making

https://www.youtube.com/watch?v=IwK-CshmH7M

Class activity explanation

Now:

- divide the class in groups of about four-five students – 2 min.
- the task of ech group is to think about how they take decisions and how they define if an action is good or bad – 20 min.
- confrontation of groups results – 10 min.

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Ethics is that branch of philosophy that studies:

a) Beauty
b) **Conduct of human beings**
c) God and religion
d) Knowledge

2. Ethics studies:

a) **what the true good is and what the means to achieve it**
b) how human beings percept the world around them
c) the link between humans and God
d) How humans can know and learn

3. Ethics is not:

a) a set of norms and values that regulate human behaviour
b) a way to attribute a positive or negative judgment
c) aiming at define good and evil
d) **a clear list of to do and not to do**

4. **Ethics corresponds to:**
    a) Set of norms
    b) List of prescription
    c) **speculative effort to understand how moral norms have been produced**
    d) philosophical approach to life and mindfulness

5. **Ethics can be viewed as:**
    a) a "normative institution"
    b) a "social institution"
    c) **both**
    d) none of them

6. **Ethics and law regulate:**
    a) interpersonal relationships between individuals
    b) interpersonal relationships between individuals and society
    c) none of them
    d) **both**

7. **Moral principles are:**
    a) Settled forever
    b) **Innate in people**
    c) Teach
    d) Individually developed

8. **Ethics and media:**
    a) As nothing to do
    b) Are connected by law
    c) Are just separated fields
    d) **Are developing a more and more strict connection**

9. **Which branch of ethics works on media and ICT?**
    a) **the ethics of the media**
    b) the ethics of society
    c) digital ethics
    d) the new ethics

10. **Ethics can be:**
    a) Teleological
    b) Deontological
    c) Utilitarian
    d) **All the previous answers**

TRUE – OR – FALSE SENTENCES

1. Ethics is that branch of philosophy that studies the conduct of human beings. **TRUE**
2. Ethics studies what the true good is and what the means to achieve it. **TRUE**
3. Ethics and morality are synonyms. **FALSE**
4. Ethics is neutral, it doesn't attribute a positive or negative judgment. **FALSE**
5. Morality corresponds to the speculative effort to understand how moral norms have been produced. **FALSE**
6. Ethics includes the set of norms that distinguish good and evil. **FALSE**
7. If morality considers norms and values as facts, shared by everyone, ethics tries to give a rational and logical explanation of them. **TRUE**
8. Ethics can be viewed as a "normative institution" and "social institution" together. **TRUE**
9. Ethics has no relationship with law. **FALSE**
10. When we talk about good or bad, we can do it in moral or non-moral terms. **TRUE**

OPEN – END QUESTIONS

1. What is digital competence*? (Ability to use digital devices and the Internet in a secure and smart way.)*
2. Why is digital competence so important? *(Because digital services like the Internet or mobile phones have become commonplace.)*
3. What is digital? *(When information and knowledge are stored in a digital (numerical) way.)*
4. What is manipulation*? (Mostly dishonest and unfair motivation, mostly for egoistic reasons.*)
5. What is media literacy? *(Ability to use media in a smart and critical way.)*

OPEN – END SENTENCES

1. Ethics is that branch of philosophy that studies … (*the conduct of human beings*).
2. Ethics studies … (*what the true good is and what the means to achieve it*).
3. Ethics can be … (*teleological, deontological, and utilitarian*).
4. Morality includes … (*the set of norms that distinguish good and evil*).
5. Ethics corresponds to … (*the speculative effort to understand how moral norms have been produced*).

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what social responsibility and rights are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. To be active and aware citizens it is mandatory to have a clear overview of what responsibilities and rights are both on a theoretical and practical level.
4. The difference between the different types of duties, the moral value of responsibility and the relevance of rights are fundamental concepts today.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be the open discussion:
    - the teacher presents the topic with a short intro;
    - divides the class into groups of four-five pupils;
    - assigns the task to elaborate verbally the topic explicating own thought and/or find concrete examples;
    - close with a moment of comparison and restitution to the class of the single group's work.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. The last slide contains the explanation for the guided discussion, it is up to the choice of the teacher to use it or not.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.). They cover the whole material of the module. Evaluation depends on the rules of the given school and the teacher, of course, but we suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., they may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses smartphones, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**PRIORITY OF RIGHTS AND OBLIGATIONS IN THE DIGITAL ERA**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to understand: • what ethics is; • how it affects everyday life; • how it helps coping with digital era challenges.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Short notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• ethics • rights • responsibilities

PART II: Description of the lesson

Activity one: PPT presentation

Procedure: The teacher shows the powerpoint and explains the concepts.

Interaction: T-Ss

Time to be allocated: 20 min.

Activity two: Group - work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to think about how they take decisions and how they define if an action is good or bad.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialogue about the different situations/solutions the pupils have presented

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

BIBLIOGRAPHY

- Abbagnano, N. & Fornero, G. (2013). *Dizionario di filosofia* (3. ed. updated and widened by Fornero, G. ed.). Torino: UTET.
- Rallo Lombarte, A. (2017). *De la 'libertad informática' a la constitucionalización de nuevos derechos digitales (1978-2018) // From «computing freedom» towards the constitutionalization of new digital rights (1978-2018)*. Revista De Derecho Político, 1(100), 639-669.
- Bouchard, P. (2011). *Network Promises and Their Implications*. RUSC, Universities and Knowledge Society Journal, 8(1), 288-302.
- Elliott, D. & Spence, E. (2017). *Ethics for a Digital Era*. Newark: John Wiley & Sons, Incorporated.
- Floridi, L. & Broadbent, Stefana, contributor. (2015). *The Onlife Manifesto: Being Human in a Hyperconnected Era*.
- Geller, H. (2003). *Promoting the Public Interest in the Digital Era*. Federal Communications Law Journal, 55, 515-601.
- Mounk, Y.B. (2015). *The Age of Responsibility: On the Role of Choice, Luck and Personal Responsibility in Contemporary Politics and Philosophy*. Mounk, Y.B. (2015). *The Age of Responsibility: On the Role of Choice, Luck and Personal Responsibility in Contemporary Politics and Philosophy*. Doctoral dissertation, Harvard University, Graduate School of Arts & Sciences.
- Ziccardi, G. (2012). *Resistance, Liberation Technology and Human Rights in the Digital Age*.

SITOGRAPHY

- http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217(III)
- www.wikipedia.org for basic concepts of dury, obligation, right, responsibility
- http://nuke.carloclericetti.it/Brevestoriadelletica/tabid/370/Default.aspx
- https://www.ispionline.it/it/europa_a_scuola/documenti/carta_dei_diritti_fondamentali.htm
- www.comune.bra.cn.it

III. SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA

A. COHESION

TEACHING OBJECTS

This module intends offering an overview of the present society, through the use of the concept of "global village" with particular reference to the role of Internet as an agent of social change that, on one side, enhances cohesion among people, and on the other renews and strengthens imbalances already existing in society.

THE WORLD IS A GLOBAL VILLAGE

The term society derives from Latin “*societate*”, a derivative of socius, "companion", which indicates the state of being together with other people.

Nowadays the term society is used to refer to any human group united by common interests, in which various kinds of relationships and forms of cooperation are established to ensure the survival and reproduction of the whole itself and its members.

Anthropology defines culture as the set of behaviours and knowledge that people acquire as members of a society, and which serve to adapt to the environment in which they live and to transform it, weaving intertwining relationships. Society is associated with synonyms as a community, association, and it is a concept linked to getting in touch with people.

The development of medias has helped to expand the boundaries of the various communities, thanks to the sending of letters first and then to the phone, it was possible to stay in touch with even the most distant relatives and acquaintances; the birth of Internet has further widened the aforementioned borders, allowing to build new communities and / or reinforce existing ones through the use of a computer or smartphone.

Being part of a community, even if virtual, is the attempt to respond to the primordial human needs of expressing oneself, of being part of a group and of extending the network of friendships. In the past, the community dimension was limited by spatial and temporal constraints, but new technologies allowed to overcome these limits, and everyone is able to broaden his own social network.

Today we talk about digital transformation, an innovation that has involved all the sectors of the daily life of humanity: media, institutions, tourism, industry, personal services, publishing, etc. An innovation made by mobile computers and devices connected on the web that make easy communication and interaction between people easy, but also all the digital technologies created by man in order to simplify and help some aspects of daily life (for example, think of the latest cars generation, with digital controls for safe driving).

In his essay *Understanding Media: The Extensions of Man* (1964), Marshall McLuhan defined the concept of "global village", that nowadays it is more current than ever: we receive news, information, messages simultaneously from every corner of the planet.

The communication media have transformed the world into something that can easily be explored like a village, hence the global village expression. An oxymoron (rhetorical figure consisting in approaching, in the same phrase, words that express opposing concepts) that today is used to talk about globalization and the role of the internet as an engine of "approach".

The phenomenon of globalization can be briefly described as a process in which people all over the world feel increasingly closer, economically and culturally, through commerce, IT (information technology), television, cinema, transport, etc. The anthropologist Ulf Hannerz defines the term globalization as a general and increasing interconnection, according to different perspectives (economic, political, cultural), combined with a growing awareness of being part of the same humanity on a planetary level.

McLuhan declares that, in relation to the continuous development of the "global village", it is important to study mass media not properly on the basis of the contents they convey, but on the basis of the different ways in which they organize communication.

This thought is summarized with the phrase "the medium is the message", which defines the concept of medium as an extension and empowerment of human faculties. For

example, a first medium observed by McLuhan was the typographic one: the press had a great impact on the social fabric and gave rise to very different effects; for example, on the political level it became a propaganda tool, while on the educational level a literacy medium, and more generally, a research means.

The invention of printing in the middle of the fifteenth century, has reached the book market in the West, and has considerably increased the audience of readers, although this invention was not immediately well received by many of his contemporaries.

McLuhan's reflection embraces, in general, any type of media. The medium is all that gives rise to a change; according to this meaning, the clock can also be defined as a medium, as it has transformed the way of perceiving and managing time. For example, the Web has changed our approach to knowledge, as it represents a huge collection of knowledge from around the world. Thanks to the internet, our personal and collective memory is constantly and everywhere accessible. Collective memory has become an easily questionable heritage, a potential response to our desire to know everything, at any moment, instantly. We can reach anyone by email with a mailing address, delivering our message: the world has become, at least in this sense, really a village.

The internet revolution can be summarized in 3 points: speed and potential universality in connections, vastness and continuous updating of the collective heritage of knowledge and information; equal access by all users. This last point, as we will see later, raises the discussion about the psycho-social effects of the web, one of which is the growth of a new form of social exclusion for those who cannot access the internet. Furthermore, it is not clear whether digital technologies can help to bridge social interactions between differences (if defined by ethnicity, religion, class, sexuality or age) and generate social formations that can be both diverse and socially cohesive.

THE DIGITAL TRANSFORMATION OF SOCIETY: RELATIONS THROUGH SOCIAL NETWORKS

As the birth of the press, new extraordinary media have extended our senses, amplified our faculties and possibilities to communicate, inform ourselves, have fun and learn. Through a smartphone we can "surf" on the web continuously, anywhere and at any time of the day.

The Internet is easy to use as all applications share the same graphic setting and interaction with objects, it's available without the need to read a manual. Furthermore, there is the expressive dimension of the web that allows everyone to express themselves and create new contents that can be made instantly accessible; and finally, the community dimension, that is interaction between people.

With what is now called web 3.0, the user is transformed from a passive actor to the protagonist of the creation and management of content on the network, creating new logic and new processes in what is also called a collaborative web. Social networks represent the clearest example, they are applications that allow registered users to share and interact with each other textual contents, images, video and audio.

Sociologists, anthropologists and philosophers see the internet as a new "environment" of study, a huge virtual space in which the online social dynamics intertwine with the offline one, giving life to new social phenomena. Today we talk about "culture of connectivity" that sheds light on the growing omnipresence of digital platforms in people's lives, through the use of numerous applications (social media) and mobile technology (smartphones, tablets, etc.).

The highest incidence in the use of social networks in Europe is registered among young people aged 16 to 24, most of whom have never known a world without direct access to the internet. For young people, social networks are a tool to express themselves, through the creation of profiles that describe their personal interests, hobbies and ideas on a wider range of topics. What we call “Generation Z”, which refers to people born from 2000 to 2013, are those who know the rules and the functioning of social media, much better than adults, because they have been accustomed to the use of technology since birth. The

Internet and its social media have transformed the way this generation, commonly referred to as "digital natives", interacts and communicates with the world.

Instagram is, at the moment, one of the most used social networks among young people, where communication takes place mainly through photographs and videos. This social network is emerging as an online photo diary, in which people share events of daily life with their acquaintances and can be updated on the events of others. Instagram gives the possibility to follow both celebrities' profiles and of unknown people, to whom we can connect for the most disparate reasons: sharing ideas, sporting interests, professional, etc. Through the use of keywords (tags) it's easy to identify the contents of interest and view the profiles that have published images with related and specific terms, anticipated by the symbol #.

Social networks like Instagram and Facebook have become a medium for social affirmation, which is measured through the *likes* a person receives in his posts, and which is brought back to the expression of "being popular on the web". There are rules and strategies to increase popularity on social networks, which require a certain amount of time and energy, and which can lead to new social mechanisms such as the *selfie* and the *influencer*.

According to the Oxford Dictionary, the word selfie was first used in 2002, and within a decade, the term was chosen as the "word of the year". Currently, selfies are taken by millions of people around the world every day, including politicians, actors, musicians, sportsmen and even space astronauts.

The term selfie means any photograph in self-portrait format, taken alone, with one's partner or with other people; photography can be achieved with the arm outstretched and the lens pointed towards oneself, or pointing the camera towards a mirror, and is usually shared in social media.

Selfie is not just a trend phenomenon but has implications that affect both society and its way of communicating, through photography and art in general. Moreover, selfie is a manifestation that involves the identity of people, on one hand under the aspect of vanity and showing off, on the other in relation to the discovery of oneself. Some research shows

that girls between 18 and 30 years are strongly influenced, in their consumption behaviour by particular users who populate social media, defined influencers.

An influencer is someone who, through social networks, is able to direct the consumer's opinions and behaviours of a very high number of people and to promote messages quickly and effectively. These people have the ability to influence their followers thanks to their ability to communicate on social networks and their authority over certain issues. It is precisely the high knowledge of a certain topic that distinguishes the influencer and that confirms his authority and the trust of his followers.

The rapid diffusion of Instagram has encouraged many companies that today use it as the most important advertising platform for their products, involving the so-called influencers.

Recognizing that individuals differ in their willingness to participate on online forms of social networking, the success of these social networks is related to the fusion between real and virtual community: most people use it to improve the ability to interact with others and of self-representation, but also to improve their professional lives.

Social media such as Facebook and Instagram generally do not involve any direct financial cost for users, but the price of free is the lack of privacy. Although most social media and content sites are free, they need to monetize, and they do it by placing advertisements to users and selling their data to advertisers to better target them. We must realize that nothing we do on the web is private - the research we do, the places we visit or the articles we read. All these data are acquired and in many cases, transferred to develop advertising activities, triggering continuous discussions on the privacy matter.

COHESION IN THE DIGITAL ERA

Social media have become a part of almost everyone's life, and their popularity has grown since the mid-2000s. It has revolutionized the way we communicate and share information with friends, family and strangers around the world.

Social media has turned into a space in which we form and build relationships, shape personal identity, express ourselves and learn about the world around us.

Social platforms promote a sense of community and facilitate the exchange of knowledge, for this reason some scholars advance the hypothesis of the web as an instrument of social cohesion.

Social cohesion as a normative term describes a positive state of social relations within a given locality (context) or society. It may include consideration of belonging to a community, society, or feelings of attachment to a place; inclusion, in relation to opportunities for access to the labour market, education, health and housing; participation in social activities. As a sociological term, cohesion refers to the degree of interconnection in the network of relationships.

Conceptually, there is no broad consensus on a distinction between social cohesion and social inclusion. Both terms, cohesion and inclusion seem to imply the concept of participation, capacity (economic, social, physical, etc.) and the opportunity to be a part of it. They imply a sense of dichotomy: to be included or excluded.

Digital technologies and social media platforms offer great potential to foster social cohesion, they have strengthened existing social ties both locally and globally, and some research shows that people feel more emotionally supported. Moreover, the web is being developed more and more around the universal encyclopaedia, constantly updated, where we can meet different cultures.

To these positive aspects, it is counterpoising the negative impacts for other forms of social participation, such as that of a new form of dependence on the Internet, which has had a major impact on generation Z and that of the Millennials.

Related studies link the massive use of social media among young people to different psycho-social consequences such as depression, cyberbullying and fear of being excluded. This last point concerns the feeling called Fear of Missing Out (FoMO), which we can translate with the fear of losing an opportunity to socialize with others, to "be cut off".

The term, particularly used by young people, indicates the concern that social events, as particularly “fun activities", could be in place without oneself being there to enjoy

themselves as an outcast. FoMO is characterized by being constantly connected with what others do, and is associated with a low degree of satisfaction of their own lives.

In addition to the effects just described, digital technologies and social media can reproduce existing social disparities such as, for example, among those whose online access is limited, creating the so-called “digital divide”.

In 1995 less than 1% of the world's population was online; today the percentage has risen to 40%, for a total of 3.7 billion Internet users worldwide.

Internet access is still very irregular in global distribution. In Europe, which has a world population of 822.7 million people, the penetration rate of those who have access to the network is about 80%, with 659.6 users connected; while in Africa, the percentage is 29%.

The use of the internet is clearly transversal to a number of factors: age, socio-economic status, gender, geographical position, levels of education, religion, ethnicity, digital literacy and language; these factors can all act as obstacles to access to digital communication.

And for those who, instead, have access, the time invested in engaging with virtual communities can potentially have a cost for "real life", probably reducing the prospects for the development and maintenance of "live" interaction, especially in their local context.

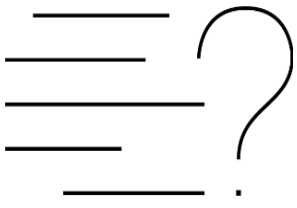
The digital divide is based on the premise that lack of access to the internet can cause combined disadvantages where they already exist. Access to the web at national level and the percentage of users of citizens are related to the economic performance of a country: the more a country is developed in economic terms, the more people can afford digital technologies and rely on them in their daily activities.

In this sense, the internet is inclined to widen social gaps because digital inclusion has to do with disparities in terms of citizen participation in information technology. As advanced users progress, non-users will probably not keep pace in terms of life opportunities and jobs. Having neither access nor the skills and motivations to use IT entail serious disadvantages, especially in younger generations.

All of this has led the European Union to introduce inclusive digital education plans, in which inclusion is understood as a continuous process that takes into account all individuals in society and their wide range of needs. In education, it is important for teachers' syllabus (in terms of IT use) to achieve higher levels of social inclusion and cohesion through the execution of recognized international good practices.

Although since the 1980s large-scale investments have been made in technology for schools, a consensus on the approaches and methodologies is still needed to exploit the use of internet technology; and this is what SOCIRES Project wants to support.

CONTROL QUESTIONS



1. *What is the global village?* It is a term that is used to talk about globalization and the role of the web as an engine of "approach" between people. It defines a general and growing interconnection, according to different perspectives (economic, political, cultural), together with the awareness of being part of the same humanity at the planetary level.

2. *What is meant by the expression "culture of connectivity"?* It is an expression that refers to the growing omnipresence of digital platforms in people's lives, through the use of numerous applications (social media) and mobile technology (smartphones, tablets, etc.).

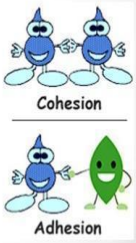
3. *What does selfie mean?* Selfie refers to any self-portrait photography, taken alone, with one's partner or with other people. Selfie is a manifestation that involves the identity form of people, on one hand under the aspect of narcissism and vanity, on the other in relation to the discovery of oneself.

4. *Describe the term of social cohesion.* Social cohesion as a normative term describes a positive state of social relations within a given locality (context) or society. It may include consideration of belonging to a community, society, or feelings of attachment to a place; inclusion, in relation to opportunities for access to the labour market, education, health and housing; participation in social activities. As a sociological term, cohesion refers to the degree of interconnection of people in the network of relationships.

5. *What is the digital divide?* The digital divide is based on the premise that the lack of access to the internet and the potential for voluntary participation within it can cause combined disadvantages where they already exist. Access to the web at

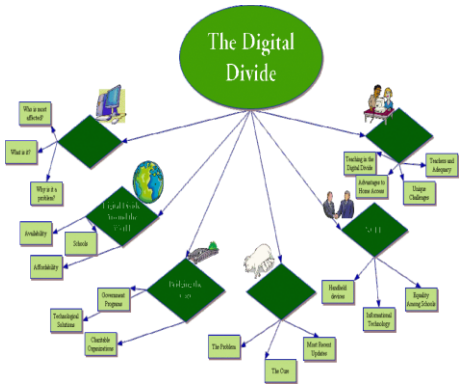
national level and the percentage of use by citizens are related to the economic performance of a country: the more a country is developed in economic terms, the more people can afford digital technologies and rely on them in their daily activities.

ELECTRONIC VERSION

SLIDES	NOTES
ERASMUS+ SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA MODULE A. COHESION	
What is Cohesion? Cohesion means 'holding together', or 'linking'. Words, sentences, paragraphs and ideas in emails, reports and memos are linked together by: • connectors • reference words • referring to other parts of a text	
Adhesion and Cohesion • The attraction between two like molecules is **cohesion**. • The attraction between two unlike molecules is **adhesion**. • Adhesion and cohesion are *inter*molecular forces between two molecules.  	

selfie

Culture of conectivity


The Digital Divide

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

CHECK YOUR SOURCES

MULTIPLE CHOICE QUESTIONS

1. To whom is the term *society* associated with?

a) World
b) **Community**
c) Internet

2. What are communication Medias for Marshall McLuhan?

a) They allow people to stay in touch with relatives.
b) They hadn't helped to expand the boundaries of the various communities.
c) **Something that has transformed the world into a global village**.

3. Which of these is a medium?

a) A clock
b) A computer
c) **Both of them**

4. **What does a medium represent for McLuhan?**
    a) **An extension of human faculties**
    b) Something that has transformed the way of perceiving and managing time
    c) The Web is the medium

5. **Social networks are applications that:**
    a) Don't share the same graphic setting and interaction with objects
    b) **Allow registered users to share and interact among each other**
    c) Can send email with textual contents, images, video and audio

6. **The highest incidence in the use of social networks in Europe is registered among young people aged:**
    a) **16 to 24**
    b) 9 to 25
    c) 13 to 24

7. **Social media have turned into a space in which:**
    a) **we form and build relationships**
    b) we lose personal identity
    c) we learn about the news

8. **Social cohesion as a normative term may include consideration of:**
    a) Belonging to a family
    b) **Feelings of attachment to a place**
    c) Participation in social works

9. **Digital technologies and social media platforms offer great potential to foster social cohesion because**:
    a) **They strengthen existing social ties both locally and globally**
    b) They are a new form of dependence on the Internet among new generations
    c) They create the so-called “digital divide”

10. The use of Internet is related to a number of factors:

a) Age, socio-economic status, gender.

b) Geographical position, levels of education, religion, ethnicity, language.

c) **Both of them**

TRUE – OR – FALSE SENTENCES

1. The development of media has helped to expand the boundaries of the various communities. **TRUE**
2. In his essay *Understanding Media: The Extensions of Man* (1964), Marshall McLuhan defined the concept of "global village", that in the past was more current than ever. **FALSE**
3. Only the Web can be defined as a medium, because it has changed our approach to knowledge. **FALSE**
4. The Internet is easy to use and allows everyone to express themselves and create new contents that can be made instantly accessible. **TRUE**
5. The highest incidence in the use of social networks in Europe is registered among young people aged 30 to 50. **FALSE**
6. The Internet and its social media have transformed the way the digital natives interact and communicate with the world. **TRUE**
7. The social platforms promote a sense of community and facilitate the exchange of knowledge. **TRUE**
8. Social cohesion as a normative term describes a positive state of social relations within a given locality (context) or society. **TRUE**
9. Related studies link the massive use of social media among young people to different psycho-social consequences such as depression. **TRUE**
10. Digital technologies and social media can reproduce existing social disparities among those whose access is free. **FALSE**

OPEN – END SENTENCES

1. The term … (*society*) is associated with synonyms as a community, association, and it is a concept linked to getting in touch with people.
2. The … (*communication media*) have transformed the world into something that can easily be explored like a village.
3. The medium is defined as a … (*extension*) and empowerment of human faculties.
4. The … (*"culture of connectivity"*) is an expression that sheds light on the growing omnipresence of digital platforms in people's lives, through the use of numerous applications (social media) and mobile technology (smartphones, tablets, etc.).
5. Social platforms promote a sense of community and facilitate the exchange of knowledge, for this reason some scholars advance the hypothesis of the web as an instrument of … (*social cohesion)*.

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what cohesion and solidarity mean.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. To be active and aware citizens it is mandatory to have a clear overview of what cohesion and solidarity is, both on a theoretical and practical level.
4. The difference between society, cohesion and solidarity are fundamental concepts today.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of an electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be the open discussion:
    - the teacher presents the topic with a short intro;
    - divides the class into groups of four-five pupils;
    - assigns the task to elaborate verbally the topic explicating own thought and/or find concrete examples;
    - close with a moment of comparison and restitution to the class of the single group's work.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. The last slide contains the explanation for the guided discussion, it is up to the choice of the teacher to use it or not.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) for each sub-module, ninety for the whole module 2. They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/ Grade:	6 – 8 (Age group 12 – 14)
Title:	**SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA - COHESION**
Time:	45 min.
Learning Objectives:	By the end of the lesson students will be able to realize: • the transformations of society with the advent of digital media; • the concept of social cohesion and digital divide.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation and Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration:	• society • internet • digital technologies • social cohesion

PART II: DESCRIPTION OF THE LESSON

Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful

Activity one: PPT Presentation

Procedure: The teacher shows the powerpoint and explains the concepts.

Interaction: T-Ss

Time to be allocated: 20 min.

Activity two: Group – work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to think about how they take decisions and how they define if an action is good or bad.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialogue about the different situations/solutions the pupils have presented

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

B. SOLIDARITY

OBJECTIVES OF THE MODULE

The module describes the concept of liquid modernity and, in relation to it, deals with the theme of solidarity and how the Internet represents an instrument for expanding its field of action, providing some practical examples.

THE LIQUID SOCIETY

In relation to the first chapter, we want to take on the concept of a global society according to the vision of the sociologist and philosopher Z. Bauman who, in his numerous books, has considered our society using the concept of liquid modernity. According to his interpretation, we are a society that lives for consumption and in which everything is merchandise, including the human being. In modernity, everything is permeated by the "liquidity", or "fluidity", which is the characteristic of liquids, which cannot be sustained by a form because they do not have internal cohesion.

According to Bauman, the relationships between people, in all aspects of life, are fluent, they are changing, and it means that actually there isn't the "solidity" of the past. Communities are no longer compact and long-lived, but they turn out to be fragile, precarious, tending to individualism, and always at risk of extinction. One of the characteristics of sociality is the mediation of interpersonal relationships through everyday use of digital technologies, which allows you to manage relationships in a more fluid way, without having to be physically present. The relationship characterized by the effective encounter, in a physical environment (such as, for example, in a square), is replaced by the "connection" to the Web, the virtual space, also called cyberspace.

The digital revolution and the virtualization of reality exalt some characteristics of the liquid man: the speed, the need to establish relationships, the search for one's own identity and emotions. Nowadays, in the social sciences, the impact of the Web on society is seen, on one hand, with mistrust and distrust, on the other supported and disseminated for its immense potential. We are witnessing a radical transformation in which cyberspace

is interposing itself as an environment to inhabit, which is intertwined with the real world and which influences the construction of the identity and relationships of human beings.

The criticism of digital interaction is that it does not provide the sense of community or empathic connection that is necessary for the increase of social cohesion, simply by promoting a more intelligent kind of relationship, based on chats and social networks, disengaging a deeper involvement. In a recent interview, Bauman explained:

> "*The Internet makes things possible that were previously impossible. Potentially, it gives everyone convenient access to a vast amount of information: today we have the world at your fingertips. In addition, the Internet allows anyone to publish his thoughts without asking anyone's permission: each one is a publisher of himself, something unthinkable until a few years ago. But all this - ease, speed, disintermediation - also brings problems. For example, when we leave our houses and we are on the street, in a bar or on a bus, we interact willy-nilly with the most diverse people, those we like and those who do not like, those who think like us and those who think differently: we cannot avoid contact and contamination, we are exposed to the need to face the complexity of the world. The Internet is the opposite: it allows you not to see and not meet anyone different from you. This is why the Web is at the same time a medicine against loneliness - it gives us the feeling to be connected to the world - and at the same time a place of "comfortable solitude", where everyone is closed in their network from which they can exclude those who are different and they can delete all that it is less pleasant."*

With these statements, Bauman wants to highlight how digital technologies are generating profound changes in human relation, increasingly replacing physical interaction in favour of a more fluid space of relational exchange.

If this, on one hand, allows communities to expand their boundaries, to get closer to each other, to facilitate interpersonal relationships, on the other we have to take note of how this can be put into practice as well in the offline world, in our city or in our school and, moreover, not only among our circle of friends, acquaintances, or influencers.

That said, in the next chapter we want to start an overview on the value of solidarity and its transformation into our liquid society, permeated by cyberspace and economic exchange. When we talk about solidarity, we are referring to the idea of a human value linked to social justice, reciprocity and the reduction of inequalities between human beings, and that has nothing to do with economic exchange. Recent studies in the field of social sciences are showing that, in fact, between these apparently opposed dimensions of social action there is a certain interdependence. Practices connected to trade, to "doing economy", recall the concept of "gift" that is linked to that of reciprocity, of mutual exchange; while solidarity and apparently altruistic actions often mingle with the logical economic profit.

The most modern phenomena of public solidarity, such as those of volunteerism and associations, are moving within such a contrast. To function within a liquid society, volunteering must negotiate with economic and political institutions; moreover, it's growing economic and administrative organization risks distancing it from the original idea of unconditional solidarity.

All this leads us to reflect on the contrast between the concepts of solidarity in our society which, as Bauman affirms, is permeated by the economy. Below we will explain what it means to be in solidarity today and how the digital environment can support social practices in this sense.

SOLIDARITY AND THE DIGITAL ENVIRONMENT

Solidarity is a value that includes empathy, that is, recognizing oneself in the other, and that is based on building networks of affective relationships that go beyond economic and market logic.

The word solidarity defines, on an ethical and social level, a relationship of brotherhood and mutual support among the members of a society and indicates actions aimed at rebalancing social inequalities. With the expression "being in solidarity with others" we can refer to the sharing of ideas, intentions and responsibilities: for example, we can affirm that we are in solidarity with our classmates, with our family, with our neighbours or with our colleagues.

The word solidarity also means the sharing of a helping relationship in favour of individuals in difficulty, with small or large gestures that are realized not only with the sharing of primary goods, material objects, money, but also with the collaboration between people.

Nowadays there are many manifestations of solidarity that are embodied in different social practices such as, for example, socio-existential voluntary work, associations, mobilization during great natural disasters, blood donation, etc.

Speaking about solidarity leads us to introduce also the community dimension, which raises an important question: are we only in solidarity with the members of our community, then towards the people we know, or indiscriminately towards everyone?

Initially, the mutual aid associations were formed starting from the sharing of a common situation, the same among the people, who then decided to engage in a collective action of mutual aid. Born inside the psychosocial and health fields, these groups aim to develop supportive forms of support for overcoming everyday problems such as, for example, associations of disabled people, the elderly, the neighbourhood, etc.

Today, however, there are many groups based on difference rather than equality, one of the major examples is represented by the numerous reception centres for foreigners who were trained throughout Europe to meet the need to integrate people from different countries and cultures. Another important example of how solidarity can cross the boundaries of cultural and social differences, we find it at the base of the European Union itself. Solidarity is the founding principle of the construction of the European Union and is considered as the only instrument to overcome the obstacle of the difference between the different Member States and to foster cooperation among peoples.

In the preamble to the Charter of Fundamental Rights of the European Union, it is written:

> "*The peoples of Europe, in creating an ever closer union between them, decided to share a future of peace based on common values. Aware of its spiritual and moral heritage, the Union is founded on the indivisible and universal values of human dignity, freedom, equality and solidarity.”*

The concept of solidarity has always characterized the work of the United Nations, whose vision is based on the premise of unity and harmony among the countries that are part of it; the main objective of the Organization is to guarantee dialogue and mutual commitment based on solidarity. Below is an extract from the Millennium Declaration, a document that shows the 8 objectives that the Member States had determined to achieve by 2015. Solidarity is described as an essential value of international relations of the 21st century and according to the following terms:

> "*Global challenges must be managed in a manner that distributes costs and burdens fairly in accordance with the fundamental principles of fairness and social justice. Those who suffer or benefit less should benefit from the help of those who benefit most*."

Solidarity is a multi-faceted value, which can be perceived within a group, such as family, friends, and a voluntary association; or to the outside, between the members of a State and between the various European countries and the world.

Solidarity is a concept that seems to connote more the relations of support between individuals, for this reason the question arises about how it is being characterized in the liquid society.

Digital technologies can lead to the devaluation of the concept of solidarity: it is no longer based on "value", rather on "connection", leading to a "connectivity solidarity" that disengages active participation in society. This mechanism can actually already be present in our way of being in solidarity nowadays: through a simple click we can sign an online petition to protect the human rights of the indigenous people of South America, or send a donation to an association that fights poverty in Africa. With a gesture that takes even one minute of our day, we can be in solidarity with anyone, without necessarily having to be involved, emotionally and physically.

This practice makes us reflect on the solidarity and implications that it can have in our lives: the difference lies in deciding to be in solidarity because we believe that our commitment can help improve the condition of another person; this is why the action cannot even be limited to clicks, but can be declined in various forms of support, both online and in real life. We can be supportive with just one click, and for this the Internet is

an effective tool as it facilitates a certain type of altruistic actions, but this should not be just a simple gesture of routine, as we are used to clicking every day. If just one click were enough, we would have already solved all the injustices in the world. If just one click was enough to increase social cohesion among human beings, we would already be living in a society without disparity, differences and prejudices.

The culture of connectivity leads scholars to question how the connection between members of digital networks can be translated into active participation in society and the sharing of values such as solidarity.

Virtual reality is a kind of challenge for humanity and, in its own way, digital iteration can help solve existing problems in reality, improving cultural understanding and ensuring universal human rights are widespread throughout the world.

The Internet undoubtedly has the capacity to tackle inequalities inherited from physical space and engage ourselves in the ethical and moral problems of distant "others": this "mobilizing power of the Internet" can promote "bottom-up global solidarity".

Below are some examples of how the Internet can be a tool for empowering social practices of bottom-up solidarity.

FROM SURVIVAL TO CROWDFUNDING: EXAMPLES OF SOLIDARITY THROUGH THE WEB AND BEYOND

The first example taken into consideration is Survival International, a non-profit organization that was founded in 1969 by a group of people determined to take solidarity actions towards the indigenous peoples of the world.

Its mission is to help defend the lives, lands and future of people who should have the same rights as other contemporary societies and offer them support to denounce the violence and racism they suffer every day. Survival's actions are manifold as, for example, to exert pressure on governments to recognize the rights of indigenous peoples; document and report abuses against them and intervene directly to stop them.

For several years, Survival had no economic entry and was managed by volunteers, but soon it became clear that the only way to guarantee the survival of the indigenous peoples

was to seek public support. It is thanks to the support of thousands of supporters from all over the world that nowadays Survival has become a worldwide movement that has radically changed the attitude towards indigenous peoples in many parts of the world. The Web has certainly represented an effective tool to the mission of this organization, on their website it is written:

> "*The Internet is a very valuable work tool that allows us not only to be fast and to reach a huge audience (and without waste), but also to follow many more cases than before. Often we can denounce them the moment they happen and in many different languages. The speed of the intervention is an essential tool for the defence of the tribes, and an effective deterrent for those who want to continue to take over lands and lives with impunity*."

Through the website anyone can act in solidarity to give their support. There are several actions that can be taken: registering with the organization, making a donation, writing a letter and / or signing a petition. To maintain its independence, Survival does not accept funds from governments or political parties as they themselves can be the main cause of human rights violations of the populations for which the organization are supporting. For this reason, by registering on the website and contributing with a money donation, will be supported the activities promoted. Letters and petitions are also an important form of support for the organization as they are a tool to give voice to public opinion, forcing governments and institutions to give an account of their actions. In addition to these online practices, Survival invites its advocates to word of mouth: to disseminate information on indigenous and tribal peoples and to draw attention to initiatives and campaigns undertaken. Moreover, it's possible to act in favour of the organization's mission by distributing leavens and Survival information material on all occasions when it can be read by people who share the same objectives as, for example, during book presentations, conferences, but also in libraries and shops. All these actions represent a way to support the organization towards the populations it protects, even if they are physically far from the organization's headquarters and, above all, from the people themselves towards whom their solidarity is manifested.

Crowdfunding is an English term made up of two words: crowd, "crowd" and funding, "funding", which in Italian we can translate with "finanziamento collettivo" (collective

funding). It is a phenomenon that is characterized by the collaboration of a group of people who, voluntarily, decide to use their money to support different types of projects displayed through appropriate websites (for example, Indiegogo, Kickstarter, etc.). Projects can be of a strictly economic nature, linked to a personal interest or a group of people, and aimed at earning money; or they can be social in nature, characterized by objectives linked to social and / or environmental development and non-profit.

Concerning this last aspect we focus our attention, reporting the example of GoFundMe, a site dedicated to fundraising campaigns that concern non-profit initiatives and which are linked to the principle of solidarity.

Launched in 2010, GoFundMe is an online platform around which has formed a community of over 50 million donors, its mission is to enable people to help other people, while its ultimate goal is to change the way it is donated in the world. GoFundMe allows any person who has access to the Internet to create a fundraising campaign in a few minutes and share it not only with their acquaintances, but with the whole world, via email and social networks.

Who use GoFundMe can raise funds for themselves, for friends and relatives, or even for strangers, in relation to the following needs: medical expenses, school fees, voluntary programs, youth sports, funerals, memorials and animals.

Through the appropriate app, downloadable on smartphone, users are facilitated in creating and managing their fundraising for free and, once the required sum has been reached, it can be collected in its entirety, net of very low costs that platform retains to cover the costs of managing the staff who work there. In fact, this website does not work alone, but behind it there are people who work there to offer an efficient service; itself survives mainly through public and private donations

Among the many campaigns carried out, there was the one for Anna, a 75-year-old pensioner who collects bottles along the way to get money to provide for their children and grandchildren. When she was fined for picking up bottles at a train station, a person read the story in the newspapers and set up an online campaign to help her cover the fine and have a better future. Completely different from the story of Elias, who was injured

in a car accident, he managed to pay medical care thanks to a campaign created by his family: over 6,500 people have collected about 150,000 euros in just 5 days.

Then there is the story of Walt, 7 years old, and his little sister Naima, together they set up a campaign to support a local non-profit that helps homeless people and low-income people during the Christmas season. After spreading the message, they quickly managed to raise about 10,000 euros.

Crowdfunding is a powerful tool, which is welcomed with enthusiasm not only in the non-profit sector, but also in many sectors of the economy, such as renewable energy, arts and culture, fashion, and many others. In the platforms and in the projects involved in crowdfunding activities we can distinguish those based on notions of solidarity, linked to what we could call "common sharing", and from those based on individual profit.

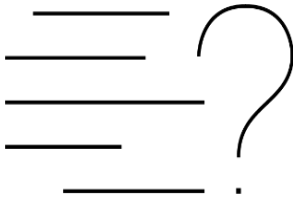
When funding is provided free or at limited costs, the projects presented aim to achieve the empowerment of the people to whom the campaign is directed, to promote the development of socially just, environmentally friendly and economically balanced actions, outside the logic of gain, all this can be considered as an expression of solidarity.

The main differences between the most ancient and traditional forms of solidarity and these new forms of "crowdfunding" are linked to speed and size: in the past solidarity was linked to local actions, in one's own neighbourhood or city, while with new technologies of communication, solidarity through financial support can take place instantly and throughout the world.

What can fail is the "physical" presence, as with our smartphone or computer we can act with solidarity towards anyone, without moving from their desk.

Technological innovations approach people, facilitating the actions of altruism and solidarity in the world, but this must not be limited to the online world, but rather be the engine of mobilization in the context in which we live. In this sense, Survival is an example of this, as the organization uses the Internet as a tool to sensitize public opinion but, at the same time, invites all its supporters to take action in their daily life so that solidarity actions can expand and contribute to the achievement of social cohesion.

CONTROL QUESTIONS



1. *What does liquid modernity mean?* The concept of liquid modernity was invented by the sociologist and philosopher Z. Bauman to describe current modernity in which the relationships between people, in all aspects of life, are fluent, they are changing, and it means that actually there isn't the "solidity" of the past. Communities are no longer compact and long-lived, but they turn out to be fragile, precarious, tending to individualism, and always at risk of extinction.

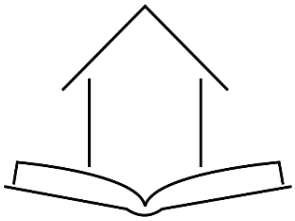
2. *What role do digital technologies play in liquid modernity?* The use of digital technologies allows people to manage relationships in a more fluid way, without having to be physically present. The relationship characterized by the effective encounter, in a physical environment (such as, for example, in a square), is replaced by the "connection" to the Web, the virtual space, also called cyberspace.

3. *What is the definition of solidarity?* The word solidarity defines, on an ethical and social level, a relationship of brotherhood and mutual support among the members of a society and indicates actions aimed at rebalancing social inequalities. The word solidarity also means the sharing of a helping relationship in favour of individuals in difficulty, with small or large gestures that are realized not only with the sharing of primary goods, material objects, money, but also with the collaboration between people.

4. *How is solidarity changing in the digital age?* Virtual reality is a kind of challenge for humanity and, in its own way, digital iteration can help solve existing problems in reality, improving cultural understanding and ensuring universal human rights are widespread throughout the world. The Internet undoubtedly has the capacity to tackle inequalities inherited from physical space and engage ourselves in the ethical and moral problems of distant "others": this "mobilizing power of the Internet" can promote "bottom-up global solidarity".
5. *What are the main differences between the oldest forms of solidarity and the most modern ones such as crowdfunding?* The main differences between the most

ancient and traditional forms of solidarity and these new forms of "crowdfunding" are linked to speed and size: in the past solidarity was linked to local actions, in one's own neighbourhood or city, while with new technologies of communication, solidarity through financial support can take place instantly and throughout the world.

HOMEWORK SOLUTIONS



Divide the class into work groups of 4/5 people. Each group has to meet and discuss together about examples of solidarity through the Web and / or the use of digital devices.

The group will have to select an example of solidarity and, with regard to it, prepare a multimedia presentation with PowerPoint to show the next time in class.

A representative of the group will show the Power Point and speak about it in no more than 5 minutes.

Each image/quote used for the PowerPoint presentation must contain the following information: Name of author, web address / book title (in the case of sitography and/or bibliography), place, year.

The presentation must be delivered at least 3 days before the reference teacher, via email or via USB key.

ELECTRONIC VERSION

SLIDES	NOTES
SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA MODULE B. SOLIDARITY	
Solidarity What is solidarity? **Solidarity** is unity (as of a group or class) which produces or is based on unities of interests, objectives, standards, and sympathies.	
Digital environment 	

What is liquid society? 	
Crowdfunding Survival	
gofundme	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Nowadays, the relationships are:

a) Characterized more by the effective encounter
b) **Replaced by the "connection" to the virtual space**
c) No longer compact

2. Solidarity is a value that includes:

a) Empathy
b) Building networks of affective relationships
c) **Both of them**

3. What does solidarity refer to?

a) **The sharing of a helping relationship in favour of individuals in difficulty**
b) The sharing of ideas with our classmates
c) The relationship among brothers

4. **The European Union is founded on the indivisible and universal values of:**
   a) Human dignity, freedom and solidarity
   b) **Equality, human dignity, freedom and solidarity**
   c) Equality and solidarity

5. **Internet has the capacity:**
   a) To promote solidarity
   b) To disengage active participation in society
   c) **Both of them**

6. **Survival International is a non-profit organization determined to take solidarity actions towards the indigenous peoples of the world through:**
   a) Engaging journalists
   b) **Online and offline actions**
   c) Sending letters

7. **For Survival International, the Web has represented:**
   a) An obstacle to the realization of activities
   b) **An effective tool to the mission of the organization**
   c) The only way to carry on solidarity actions

8. **By the Web, Survival invites its supporters:**
   a) **To the word of mouth of information on indigenous and tribal peoples**
   b) To act only by Internet
   c) To make a donation

9. **GoFundMe is an online platform and its mission is:**
   a) To fund people's online projects
   b) To change the way people use Internet
   c) **To enable people to help other people**

10. **The cyberspace facilitates the actions of altruism and solidarity:**
    a) Limited to the online world
    b) **Both in online and offline world**
    c) Only in a neighbourhood or a city

TRUE – OR – FALSE SENTENCES

1. Nowadays, the relationships between people are stronger than the past. **FALSE**
2. The digital revolution exalts some characteristics of the liquid society: the speed, the need to establish relationships, the search for one's own identity and emotions. **TRUE**
3. Digital technologies, on one hand, allows communities to expand their boundaries. **TRUE**
4. Solidarity is an economic change that includes empathy. **FALSE**
5. Solidarity is a founding principle of the European Union. **TRUE**
6. The Internet has the capacity to tackle inequalities inherited from physical space. **TRUE**
7. Digital technologies can lead to the devaluation of the concept of solidarity: it is no longer based on "connection", rather on "value". **TRUE**
8. “Connectivity solidarity" can disengage active participation in society. **TRUE**
9. With new technologies of communication, solidarity can take place instantly and throughout the world. **TRUE**
10. Technological innovations facilitate actions of altruism and solidarity in the world, but this must not be limited to the online world. **TRUE**

OPEN – END SENTENCES

1. Digital technologies are generating profound changes in … *(human relations).*
2. With the development of digital revolution, the relationship characterized by the … (*effective encounter)* in a physical environment is replaced by the "connection" to the virtual space.
3. … *(Solidarity)* is a human value linked to social justice.
4. The word solidarity defines a relationship of … (*mutual support)* among the members of a society and indicates actions aimed at rebalancing *society … (inequalities)*.
5. The "mobilizing power of the Internet" can … *(promote)* "bottom-up global solidarity".

OPEN – END QUESTIONS = CONTROL QUESTIONS

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what cohesion and solidarity mean.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. To be active and aware citizens it is mandatory to have a clear overview of what cohesion and solidarity is, both on a theoretical and practical level.
4. The difference between society, cohesion and solidarity are fundamental concepts today.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be the open discussion:
    - the teacher presents the topic with a short into
    - divides the class into groups of four-five pupils
    - assigns the task to elaborate verbally the topic explicating own thought and/or find concrete examples
    - close with a moment of comparison and restitution to the class of the single groups work

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. The last slide contains the explanation for the guided discussion, it is up to the choice of the teacher to use it or not.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) for each sub-module, ninety for the whole module 2. They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.

SAMPLE CLASS PLANS

PART I	
Level/ Grade:	6 – 8 (Age group 12 – 14)
Title:	**SOLIDARITY**
Time:	45 min.
Learning Objectives:	By the end of the lesson students will be able to realize; • what is solidarity; • what transformation of solidarity is within the internet
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation and Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration:	• solidarity • internet • digital technologies • crowdfunding • online activism

PART II: DESCRIPTION OF THE LESSON

Activity one: PPT presentation

Procedure: The teacher shows the powerpoint and explains the concepts.

Interaction: T-Ss

Time to be allocated: 20 min.

Activity two: Group – work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to think about how they can show solidarity and how they relate solidarity to the internet.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialogue about the different situations/solutions the pupils have presented.

Interaction: T-Ss, Ss -T

Time to be allocated: 10 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

C. DIVERSITY AND TOLERANCE

TEACHING OBJECTS

In this module tackle the problem of diversity and try to give answers to understand the possible ways for its solution. Encounter and dialogue allows people to understand the differences among them, and to enrich themselves with the diversity of the “other”.

THE RICHNESS OF OUR HUMANITY IS DIVERSITY

As we have seen in the previous module, today solidarity exceeds cultural, social, ethnic, and national and gender differences far as in the past; it is a value that defines the ability to identify ourselves with the expectations, the needs and the whole life even towards those who are different.

In this last part we want to tackle the problem of diversity, as it currently represents a real challenge to social cohesion, able to put a strain on solidarity itself, that is, the relationship of reciprocity between men.

The diversity in its absolute form leads back to the concept of extraneousness, which from 1800 to the present day, has increasingly become the focus of studies in the social sciences, including those of the sociologist Bauman, who has dedicated several works to it.

The extraneous is perceived as a person who arrives in a group and, precisely because he is different from the members who constitute it, urges internal destabilization because it is not known whether to recognize him as a friend or as an enemy, and for that he is defined as "other", different from "me" and "us".

Nowadays the extraneous is brought back to the foreigner, who becomes responsible for the crisis of the social order and homogeneity that is being "all the same" within the group.

The social order in the Western World is essentially based on the principle of sharing interpersonal relationships, starting from the family, which are established in a territory

bounded by borders, that is the State, and which are characterized by common projects, such as norms, rights and duties.

This way of ordering the world sees migration as a threat, as it is seen as the bearer of other different forms than those just described. According to this logic, today we are witnessing the exclusion of certain categories of subjects from the borders of social inclusion, for a return to that apparently stable and romantic idea of the community perceived as a safe haven in the sea of changes that have flooded societies with a "multicultural" character.

Migration is a phenomenon that has always accompanied the history of humanity, and especially in recent centuries has been perceived as an "anomaly to be corrected" in order to maintain order and social cohesion; all this through assimilation, that is by making the stranger equal to the members of the group in which he is received, or through his exclusion. As Bauman notes, in our liquid society marked by the massive movement of people and money, a change is taking place: foreigners are no longer recognized as an anomaly, because they have been living among us for a long time. So the question focuses on how we can coexist peacefully with foreigners.

Although pluralism is now an accepted principle in our society, relations with foreigners continue to be a problem, as evidenced by the waves of racism that cross not only Europe, but the entire world.

There are more and more people who claim that foreigners are a resource that benefits the community; that diversity is not only inevitable but also precious because it generates new experiences of human growth and evolution.

Despite this, diversity, also defined as otherness, continues to arouse feelings of insecurity, and this is more due to the influence of the media, such as newspapers, television programs, websites and social networks, which in recent years have encouraged the spread of exclusion, rejection policies and closure to the other.

The recurrence of words such as "risk" (of losing jobs, terrorism, etc.), "danger" or "emergency" against foreigners has definitely increased in the media, generating feelings of fear in our society. Fear is able to shatter trust among people, to break the bonds of social solidarity and weaken the love for otherness and diversity in general.

On one side, the most extremist views see the foreigner as an enemy, but the more moderate opinions insist on recognizing the other, his identity and culture. While building a collective cultural dimension that goes beyond differences through the identification of common values. Precisely the foreigner is different because he/she comes from another culture, but at the same time as a human being is the same as us.

The theme of recognition of the other is connected to that of identity. The construction of our identity is linked to the reciprocity of recognition, which means to develop and consolidate one's identity, we need other people with whom it is possible to be recognized and with whom we recognize them.

The ethic of recognition imposes the duty to recognize the other, but the other is understood not only as the foreigner, but can be represented by our peers, by our neighbour or even by one of our closest relatives. If we struggle to recognize the other, this means we struggle to recognize and accept ourselves too.

It should be noted that our society is characterized by a multiplicity of individuals, with their own interests, relationships, behaviours and needs; humanity is synonymous with unity but also with the diversity among all human beings.

The richness of our humanity lies in its diversity which represents the true value to be cherished and cultivated, and it is through encounter and dialogue that the walls of incomprehension and fear can be broken down and social inequalities can be rubbed out.

Dialogue allows us to understand the differences, and to take positive advantage of them. The role of the school is to educate young people to dialogue with each other, to learn to enrich themselves with the diversity of the other.

The Web can help us in this goal, as it allows us to communicate quickly and gain the knowledge of other human beings, but it is above all “with and among others” that we can overcome the prejudices towards diversity and learn to accept and tolerate it. In the next chapter we will discuss an example of how young people can mobilize together in favour of inter-cultural dialogue and to counteract the various forms of hatred towards those who are seen as “different”.

THE FIGHT AGAINST HATRED AND INTOLERANCE ON THE WEB: NO HATE SPEECH YOUTH CAMPAIGN

The campaign “Young People Combating Hate Speech Online” is a project created in 2012 by the youth sector of the Council of Europe, which aims to combat racism and every forms of discrimination online, by providing young people and the agencies involved with the necessary skills to recognize and take action against human rights violations.

The Council of Europe’s Youth Campaign against hate speech online wants to raise awareness among young people; however, this kind of action can be adapted to other age ranges and other profiles of learners, adults included.

The development of social networks has increased the level of people's participation in virtual space in a variety of ways, allowing the sharing of personal contents and opinions. The novelty is that everyone with access to the internet is now both publisher and public speaker and, moreover, a number of studies have shown that we can say things over the internet that we would not dare to say in public in the ‘real’ world.

In the last few years, intolerance and ‘hate’ through the Web has become one of the most widespread forms of human rights abuse with very serious negative consequences both in the real world and in the virtual world. Incitement to hatred as defined by the Committee of Ministers of the Council of Europe covers all forms of expression which spread, incite, promote or justify racial hatred, xenophobia, antisemitism or other forms of hatred based on intolerance, towards minorities, migrants and prejudice about orientation, sexual and gender.

The online words and speeches of hatred feed within society, reinforce the stereotypes and can lead, in some cases, to physical violence. We have examples in the history of mass violations of human rights, such as genocide and persecution against people of different ethnic origins, who have always been preceded or accompanied by hate speeches.

Stereotypes are beliefs or shared thoughts, generalizations about particular groups that can be positive, negative or neutral. If positive, they can benefit those who are directed; stereotypes become harmful when they are used as a tool for discriminatory treatments. Many stereotypes that appear to be neutral actually contain an element of evaluation or

judgment. To better understand the difference between the two terms, we can use the following example: "Women are not particularly skilled in driving cars". Immediately this proposition seems to be a fact, but in effect a judgment is being made on the technical capacity of women. Even when stereotypes or prejudices seem positive, they almost always have a negative aspect. For example, the statement "Thais are the most smiling people in the world" is a positive judgment for people of Thailand, but contains a negative judgment compared to other people who are less good-natured. When a stereotype or prejudice is based on skin colour or national origin, one can easily slip into racism. Racism is an ideology that causes discriminatory or offensive behaviour towards people because of their imagined "inferiority". Negative behaviour and attitudes towards a particular group of people, such that those people are not able to enjoy their human rights, constitute discrimination that is the opposite of equality.

The No Hate Speech Movement youth campaign encourages respect for freedom of expression and aims to develop alternative responses to hate speech, promoting human rights online, and making the Internet a safer space for all.

The Campaign has developed through various actions, first and foremost the creation of a Website that represents a meeting point where all the actions undertaken in the various European countries have been merged together with many useful information about the problem: reports, life stories, articles, resources, etc.

On the website, anyone can browse in a special area called "Hate Speech Watch" consisting of examples of hate speech online submitted by users. It offers the possibility to denounce hatred posts on the social networks (or other websites), discuss possible approaches with other young people in the movement and organise actions against hate speech, including the so-called "European action days".

Each action day focuses on different aspects of hate speech and encourages action in support of particular target groups. Just to give some examples, the day against Islamophobia was announced on September 21st and the day for human rights online was held on December 10th.

In addition to online activities, the Campaign has promoted training courses, seminars, conferences, youth events, festivals, thus ensuring the involvement of young people in their "real" life.

The No Hate Speech Movement has the following goals:

- To raise awareness about hate speech online and offline.
- To support human rights education activities for action against hate speech and the risks it poses for democracy and to the well-being of young people.
- To develop and disseminate tools and mechanisms for reporting hate speech, especially in its online dimension, including at national level.
- To mobilise national and European partners to prevent and counter hate speech and intolerance online and offline.
- To promote media literacy and digital citizenship and support youth participation in Internet governance.
- To contribute to the implementation of the Council of Europe Action Plan on the fight against violent extremism and radicalisation leading to terrorism, notably by addressing root causes for the violent radicalisation of young people.

Among the many materials that can be found on the website, there is a manual named Bookmark that has been designed to support the No Hate Speech Movement, useful for educators working to address this problem, both inside and outside the formal education system.

In the manual it is emphasized that: "*The need for educational initiatives which target cyber hate can partly be seen in the growing amount of abuse to be found on the Internet, much of which is extreme and racist in tone and can threaten the fundamental values of a democratic society. However, cyber hate is not just a problem related to racism and discrimination; it is also a problem related to the way that people use the Internet. This*

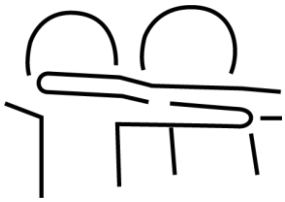
makes it a relatively new phenomenon, and one which is not fully recognised or understood. The 'novelty' of online hate speech means that this is a problem that the world does not yet quite know how to deal with. "

In the manual there is also a brief list to encourage young people to take part in the Campaign, which is shown below:

- Join the Movement on www.nohatespeechmovement.org
- Sign up to the Campaign newsletter, post photos or videos and interact with others on the Campaign website (http://forum.nohatespeechmovement.org)
- Monitor hate speech online and report examples to Hate Speech Watch: www.nohatespeechmovement.org/hate-speech-watch
- Watch out for the European Action Days and organise your own national event
- Visit the campaign coordination website at www.coe.int/youthcampaign. Find out who your national coordinator is and see how you and your group can get involved in the campaign in your country
- Share your activities – and learn about others' – in the blog "The Campaign in Action"
- Join the discussions about hate speech online and the campaign in the forum http://forum.nohatespeechmovement.org
- Disseminate the campaign in Facebook - https://www.facebook.com/nohatespeech and Twitter - #nohatespeech @nohate_speech
- Carry out educational activities about hate speech using the manual (Bookmarks)
- Take action online and offline to promote human rights for all and fight hate speech!

The No Hate Speech Movement is a positive example of how the web can support people who want to counteract the various forms of social injustice against those labelled as

"different". For this reason, teachers and students are invited to visit the relevant website and take part in the struggle for social equality and tolerance of diversity.



CLASS GAME

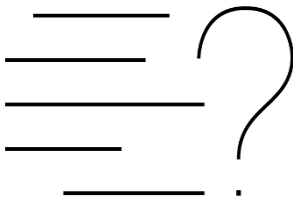
Divide the class in half, on one side there will be supporters of tolerance, on the other those who refuse to accept the “other”.

To encourage confrontation between the two opposing groups, the teacher can suggest inputs, for example by showing / projecting newspaper articles (for ex. the arrival of migrants in the city) or showing / projecting images (for ex. a refugee boat, etc.).

The teacher will have the role to collect comments from both factions, writing key words on the blackboard, appropriately divided into two columns, one for keywords on tolerance, the other for keywords against tolerance (for ex. Respect, tolerance, inclusion, love, etc. / discrimination, racism, prejudice, hostility, etc.)

The game lasts 10 minutes, after that, the teacher will brainstorm on the words and speech that emerged during “conflict” between two sides.

CONTROL QUESTIONS



1. *How can we overcome feelings of fear towards others?* It is through encounter and dialogue that the walls of incomprehension and fear can be broken down and social inequalities can be rubbed out. Dialogue allows us to understand the differences, and to take positive advantage of them.

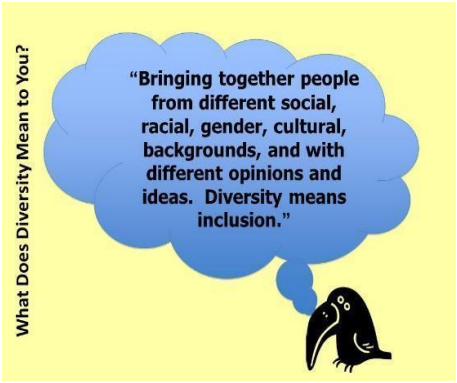
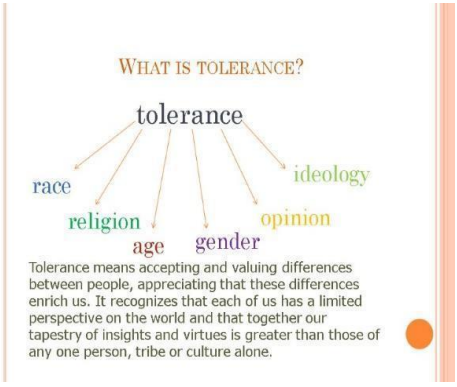
2. *What is the No Hate Speech Youth Campaign?* The campaign “Young People Combating Hate Speech Online” is a project created in 2012 by the youth sector of the Council of Europe, which aims to combat racism and every forms of discrimination online, by providing young people and the agencies involved with the necessary skills to recognize and take action against human rights violations.

3. *What does it mean “incitement to hatred”?* Incitement to hatred as defined by the Committee of Ministers of the Council of Europe covers all forms of expression which spread, incite, promote or justify racial hatred, xenophobia, antisemitism or other forms of hatred based on intolerance, towards minorities, migrants and prejudice about orientation, sexual and gender.

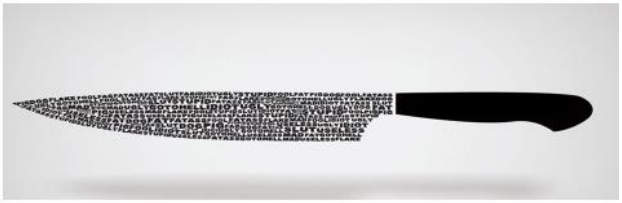
4. *What is a stereotype?* Stereotypes are beliefs or shared thoughts, generalizations about particular groups. If positive, they can benefit those who are directed; stereotypes become harmful when they are used as a tool for discriminatory treatments. When a stereotype or prejudice is based on skin colour or national origin, one can easily slip into racism.

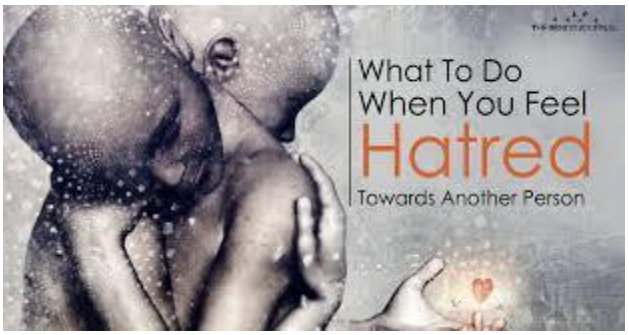
5. *What are the principles of the No Hate Speech Movement?* The No Hate Speech Movement youth campaign encourages respect for freedom of expression and aims to develop alternative responses to hate speech, promoting human rights online, and making the Internet a safer space for all.

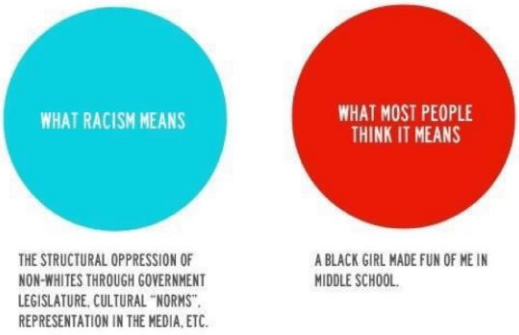
ELECTRONIC VERSION

SLIDES	NOTES
ERASMUS+ SOCIETY, COHESION AND SOLIDARITY IN THE DIGITAL ERA MODULE B. DIVERSITY AND TOLERANCE	
	
	
Digital identity 	

How does hatred affect you?







SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Nowadays, the relationships are:

a) Characterized more by the effective encounter
b) **Replaced by the "connection" to the virtual space**
c) No longer compact

2. Solidarity is a value that includes:

a) Empathy
b) Building networks of affective relationships
c) **Both of them**

3. What does solidarity refer to?

a) The sharing of a helping relationship in favour of individuals in difficulty
b) The sharing of ideas with our classmates
c) The relationship among brothers

4. **The European Union is founded on the indivisible and universal values of:**
   a) Human dignity, freedom and solidarity
   b) Equality, human dignity, freedom and solidarity
   c) Equality and solidarity

5. **Internet has the capacity:**
   a) To promote solidarity
   b) To disengage active participation in society
   c) Both of them

6. **Survival International is a non-profit organization determined to take solidarity actions towards the indigenous peoples of the world through:**
   a) Engaging journalists
   b) Online and offline actions
   c) Sending letters

7. **For Survival International, the Web has represented:**
   a) An obstacle to the realization of activities
   b) An effective tool to the mission of the organization
   c) The only way to carry on solidarity actions

8. **By the Web, Survival invites its supporters:**
   a) To the word of mouth of information on indigenous and tribal people
   b) To act only by Internet
   c) To make a donation

9. **GoFundMe is an online platform and its mission is:**
   a) To fund people's online projects
   b) To change the way people use Internet
   c) To enable people to help other people

10. **The cyberspace facilitates the actions of altruism and solidarity:**
    a) Limited to the online world
    b) Both in online and offline world
    c) Only in a neighbourhood or a city

TRUE – OF – FALSE SENTENCES

1. Nowadays, the relationships between people are stronger than the past. **FALSE**
2. The digital revolution exalts some characteristics of the liquid society: the speed, the need to establish relationships, the search for one's own identity and emotions. **TRUE**
3. Digital technologies, on one hand, allows communities to expand their boundaries. **TRUE**
4. Solidarity is an economic change that includes empathy. **FALSE**
5. Solidarity is a founding principle of the European Union. **TRUE**
6. The Internet has the capacity to tackle inequalities inherited from physical space. **TRUE**
7. Digital technologies can lead to the devaluation of the concept of solidarity: it is no longer based on "connection", rather on "value". **FALSE**
8. “Connectivity solidarity" can disengage active participation in society. **TRUE**
9. With new technologies of communication, solidarity can take place instantly and throughout the world. **TRUE**
10. Technological innovations facilitate actions of altruism and solidarity in the world, but this must not be limited to the online world. **TRUE**

OPEN – END SENTENCES

1. Digital technologies are generating profound changes in … *(human relations).*
2. With the development of digital revolution, the relationship characterized by the … (*effective encounter)* in a physical environment is replaced by the "connection" to the virtual space.
3. *(Solidarity) …* is a human value linked to social justice.
4. The word solidarity defines a relationship of … (*mutual support)* among the members of a society and indicates actions aimed at rebalancing … (*social inequalities)*.
5. The "mobilizing power of the Internet" can *… (promote)* "bottom-up global solidarity".

OPEN – END QUESTIONS = CONTROL QUESTIONS

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what cohesion and solidarity mean.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. To be active and aware citizens it is mandatory to have a clear overview of what cohesion and solidarity is, both on a theoretical and practical level.
4. The difference between society, cohesion and solidarity are fundamental concepts today.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be the open discussion:
    - the teacher presents the topic with a short intro
    - divides the class into groups of four-five pupils
    - assigns the task to elaborate verbally the topic explicating own thought and/or find concrete examples
    - close with a moment of comparison and restitution to the class of the single groups work

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. The last slide contains the explanation for the guided discussion, it is up to the choice of the teacher to use it or not.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) for each sub-module, ninety for the whole module 2. They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.

SAMPLE CLASS PLANS

PART I	
Level/ Grade:	6 – 8 (Age group 12 – 14)
Title:	**DIVERSITY AND TOLERANCE**
Time:	45 min.
Learning Objectives:	By the end of the lesson students will be able to understand: • what is diversity; • how to tackle with the “other”; • how young people can mobilize together in favour of intercultural dialogue.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation and Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful
Subject concentration:	• dialogue • discrimination • hate • online activism

PART II: DESCRIPTION OF THE LESSON
Activity one: PPT presentation **Procedure:** the teacher shows the powerpoint and explain the concepts **Interaction:** T-Ss **Time to be allocated**: 20 min.

Activity two: Group - work

Procedure: Divide the class in groups of about four-five students, assign to each group the task to think about how they can show tolerance and how they relate tolerance to the internet.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Final consideration

Procedure: The teacher stimulates a short dialogue about the different situations/solutions the pupils have presented.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- Bauman, Z. (1999). Dentro la globalizzazione. Le conseguenze sulle persone. Roma, Laterza.
- Bauman, Z. (2002). Il disagio della postmodernità. Milano, Mondadori.
- Bauman, Z. (1999). La società dell'incertezza. Bologna, il Mulino.
- Dei, F. (2015). Culture del dono e pratiche della solidarietà, in Salvati, M., Sciolla, L.. L'Italia e le sue regioni: l'età repubblicana. Vol. IV. Società. Roma, Treccani, pp. 111-128.
- Guigoni, A., Amaducci, G. (2004). *Internet per umanisti. La "rete" come strumento di ricerca, di aggiornamento, di produzione e di confronto culturale e professionale*. Milano, Alpha Test.
- Hannerz, U. (2001). *La diversità culturale*. Bologna, il Mulino (ed. or. 1996).
- Hüsing, T., Gareis, K. and Korte, W.B. (2004). T*he Impact of ICT on Social Cohesion: Looking Beyond the Digital Divide.*
- http://is.jrc.ec.europa.eu/pages/ISG/documents/EUR21474ImpactICTSocialCohesion.pdf
- Keen, E., Georgescu, M. (2016). Bookmarks. A manual for combating hate speech online through human rights education. https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168065dac7
- Lázaro Cantabrana, J. L., Estebanell Minguell, M., & Tedesco, J. C. (2015). *Inclusion and Social Cohesion in a Digital Society*. *RUSC.* Universities and Knowledge Society Journal, 12(2). pp. 44-58. Doi: http://dx.doi.org/10.7238/rusc.v12i2.2459.
- Marlowe, J. M., Bartley, A., & Collins, F. (2017). *Digital belongings: The intersections of social cohesion, connectivity and digital media*. Ethnicities, 17(1), 85-102. Doi: 10.1177/1468796816654174

- Sahakian, M., Servet J. M. (2016). Separating the wheat from the chaff: sharing vs self-interest in crowdfunding. In: Assadi, D. Strategic approaches to successful crowdfunding. Hershey, IGI Global, pp. 294-312.
- Shaw, K. (2017). 'Solidarity by Connectivity': The Myth of Digital Cosmopolitanism. In *Cosmopolitanism in Twenty-First Century Fiction*, DOI 10.1007/978-3-319-52524-2_5
- Tettegah, S., Y., (2016). *Emotions, Technology, and Social Media.* Cambridge, Academic Press.
- Zoll, R. (1998). Solidarietà. In: Enciclopedia delle scienze sociali. Roma. Istituto della Enciclopedia italiana. http://www.treccani.it/enciclopedia/solidarieta_(Enciclopedia-delle-scienze-sociali)

SITOGRAPHY

- Carta dei Diritti Fondamentali dell'Unione Europea. https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:12016P/TXT&from=EN
- GoFundMe, **https://www.gofundme.com/**
- Influencer Marketing Hub, *What is an influencer?* in **https://influencermarketinghub.com/what-is-an-influencer/**
- L'Espresso. Zygmunt Bauman: "E' il carnevale della democrazia", http://espresso.repubblica.it/visioni/cultura/2016/02/12/news/zygmunt-bauman-siamo-al-carnevale-della-democrazia-1.250232
- Survival International, https://www.survivalinternational.org/
- United Nations Millennium Declaration, http://www.un.org/millennium/declaration/ares552e.htm
- UNESCO. Fien, J. (2010). *Module 18: Globalisation, Teaching and Learning for a Sustainable Future*. www.unesco.org/education/tlsf/docs/module_18.doc
- UNESCO. Leaning, M. (2017). *Internet Accessibility Continental Comparison*. M. Leaning.
- https://en.unesco.org/sites/default/.../milweek17_marcus_leaning.pdf

IV. CO – EXISTENCE OF THE CITIZENS IN THE DIGITAL ERA

A. COOPERATION AND TEAMWORK

Living with other fellow human beings inevitably brings the question: How to behave vis-à-vis other people? There are basically three options:

- The others are (or the other is) friend(s), and you are helping each other. **That relation is called cooperation**, i.e. “co-operation” which means “working together.
- The others are (or the other is) enemy (es), and you must defend yourself against them. The question is “who – whom”; i.e., who is stronger. **Such a relationship is called competition.**
- The others are (or the other is) neutral; they are neither friends nor enemies; neither cooperation partners, nor competitors. Usually, we are simply not in contact with them.

WHAT CHARACTERIZES A GROUP?

- It is a purely administrative body.
- Everyone concentrates on themselves, their work and goals.
- Members are very careful about what they say.
- They are not open in their communication.
- Individuals compete with each other.
- Organization is relaxed and independent.
- They do not know each other well, low level of trust in a group.
- Members compete with each other.

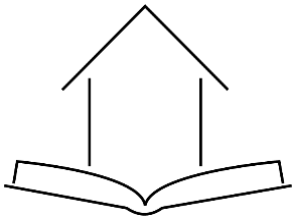
WHAT CHARACTERIZES A TEAM?

- Members of the team are dependent on each other.
- Everyone has the same, mutual goal.
- Communication is open and direct.
- Members know and trust each other.
- Competition is directed outside.
- Organization is clear and firm.
- The number of members is defined clearly.

Picture 15: Cooperation

So, **cooperation** means to work together to achieve the commonly agreed-upon targets and **teamwork** is the harmonised, common efforts to achieve those jointly agreed upon targets. In a sense, cooperation and teamwork are similar notions. It is very important to underline that teamwork and cooperation are not a totally identical effort of slaves; of course, individual targets remain. Simply, the team members realise that together, jointly, with joint efforts, their individual targets are met more effectively than just working for it without other team members, “comrades”.

HOMEWORK SOLUTIONS



1. There is a table under the text that each student fills out after the directed conversation. After that we check together if the answers are correct.

Characteristics	Group	Team
What interests do they have?	Pursue their own interests.	Everyone has the same interest.
What goals do they have?	Pursue different goals.	The same goal for everyone.
What is their priority?	Teamwork is dependent on their personal goal.	Team is the highest priority.
What is the organization like?	Relaxed and independent.	Clear and firm.
Who competes with whom?	Individuals compete with each other.	Competition is aimed outside.
What is communication like?	Communication is not open and direct.	Communication is open and direct.
What is mutual trust like?	They do not know each other well.	They know each other well and trust each other.
What is the number of members?	The number of members is not given.	The number of members is defined clearly.

2. Each student will have the text below in front of them and the students will read the text together.

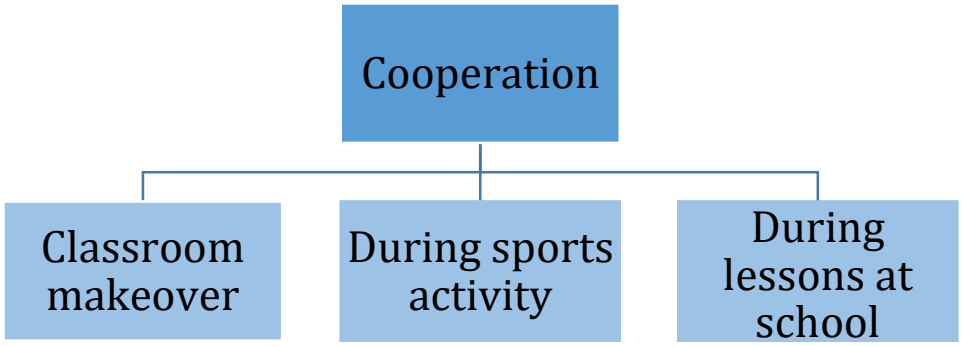
The students in form 6.A often compete with each other instead of cooperating. When few students try to achieve the same goal of being the best in class, they have to try hard.

Form 6.A is a small social group. The students are partners. They communicate with each other and share the same goal. To achieve this goal, they have to cooperate. An example of their cooperation are activities to make their classroom look good before a parent teacher meeting. The boys started to scrub their desks. Jakub read somewhere that a mutual goal can bring two opposite groups together. Form 6.A and 6.B are rivals. In the regional athletic competition, they represented the school in the relay. Their mutual goal brought them together. They worked together and tried to be the best they could.

Scientists made an experiment. They tried to figure out why people decide to compete or cooperate. Cooperation is good for everybody as long as no one puts their personal goal first. That is why trust and ability to sacrifice your own goals is the foundation of cooperation.

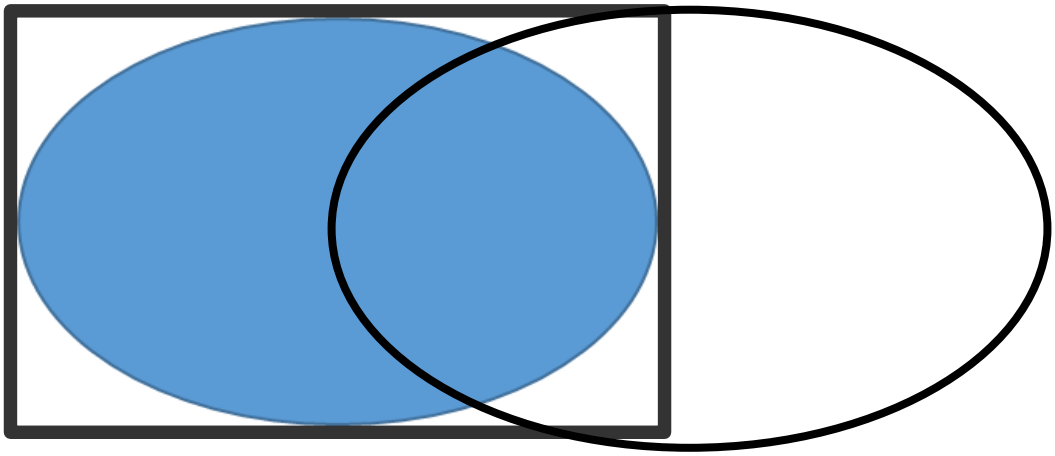
According to a boy called Jakub, cooperation should be implemented during lessons in different subjects. He himself likes to work in groups. Everyone has their own task and together they have a mutual goal. They gather and sort the information, discuss, look for solutions and compromise.

They reinforce their empathy, repress aggression and become more responsible towards others. After you have read the text, we follow with a discussion. Think and write of what examples of cooperation Jakub mentioned in the text?



3. Write what the common and different characteristics of cooperation and competition are.

Cooperation Competition

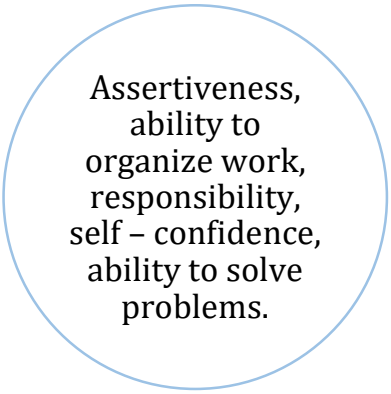


Common intersection is the realization of practical activities and reaching the goal.

Different characteristics of cooperation: The aim is the same for all members, feeling of support, fellowship, mutual communication, long term cooperation and getting to know each other. Individuals are expected to put their personal interests aside.

Different characteristics of competition: short term goal, members are not trying to get to know each other, they try to satisfy their own needs**.**

4. The teacher writes the following terms on the board and the students give their opinions. Together with the teacher they write terms connected to cooperative learning inside the circle. They revise again what the basis of cooperative learning is.



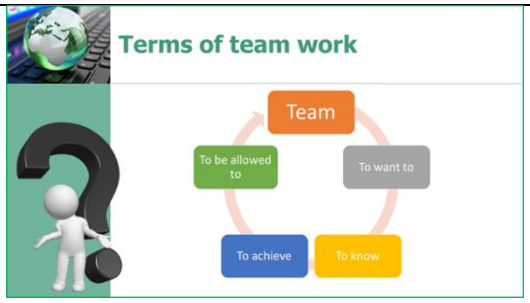
Decide which of the following skills you strengthen during cooperative learning. Explain your opinion and write it down.

Skills: assertiveness, selfishness, ability to organize your work, responsibility, self – confidence, enforcement of your opinion, ability to deal with conflicts.

In this phase of the lesson we answer the questions that follow together.

ELECTRONIC VERSION

SLIDES	NOTES

 Terms of team work Team To want to To know To achieve To be allowed to	
The advantages of team work Social and communication skills Creativity, new problem solutions	
Further benefits of team work Better mutual co-existence, Constructive solutions Faster problem solving	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. The word cooperation comes from a Latin word:

a) corporacy
b) **cooperare**
c) koncepcia

2. The correct meaning of the term co-operation is:

a) To promote your own values and goals
b) To work alone and aim for success
c) **To work in a team, to pursue a mutual team goal, to respect members of a team**

3. Co-operation is only possible

a) when working with the internet
b) in individual work
c) **in practical activities**

4. **One type of co-operation is:**
    a) A competition
    b) **Team work**
    c) Teambuilding

5. **The basic characteristics of team work is:**
    a) that organization is relaxed and independent
    b) individuals compete with each other
    c) **the members are dependent on each other and pursue the same goal**

6. **The competition within team work is aimed:**
    a) **outwards**
    b) inwards
    c) both outwards and inwards

7. **Under what conditions can a group change into a team?**
    a) When they meet by accident
    b) **When they have a mutual goal**
    c) When they start meeting up more often

8. **The number of team members:**
    a) Does not have to be exactly specified
    b) **Has to be exactly specified**
    c) Can be but does not have to be specified

9. **What are the main characteristics of competition?**
    a) Communication is open
    b) Long term goal
    c) **Short term goal**

10. **What skills are developed through teamwork?**
    a) Assertiveness, selfishness, enforcement of your own opinion
    b) **The ability to organize work, responsibility, searching for creative solutions**
    c) Creativity, empathy, aggression, self confidence

YES – OR – NO QUESTIONS

1. Does teamwork lead to development of social and communication skills? **YES**
2. Is flexibility and faster problem solving one of the benefits of teamwork? **YES**
3. Is group cooperation more effective than team cooperation? **NO**
4. Are the terms team work, group and competition considered the same? **NO**
5. Can teamwork between students help to improve relationships and co-existence? **YES**

TRUE – OR – FALSE SENTENCES

1. Is the aim of competition to achieve the same long term goal? **FALSE**
2. Is teamwork the base for cooperative learning? **TRUE**
3. The aim of cooperative learning is not only group work but mainly gaining knowledge not in a forceful way? **TRUE**
4. The ability to solve problems creatively and flexibly is not the main part of cooperation and teamwork? **FALSE**
5. Positive mutual dependence, problem solving face to face, personal responsibility and reflection are characteristics of cooperative learning? **TRUE**
6. Co-operation is only possible when working with the internet. **FALSE**
7. The basic characteristics of team work is that the members are dependent on each other and pursue the same goal. **TRUE**
8. The competition within team work is aimed outside. **TRUE**
9. The main characteristics of competition is a short term goal. **TRUE**
10. The word cooperation comes from the Latin word corporacy. **FALSE**

OPEN – END QUESTIONS

1. In what activities is co-operation carried out? (*everyday activities*)
2. What are the main characteristics of teamwork? (*cooperation, support*)
3. What is the meaning of being able to cooperate? (*being able to work together*)
4. How can rivals become team members? (*by knowing and trusting each other*)
5. What is the difference between a group and team work when fulfilling goals? (*team members have the same goals)*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand, what „cooperation" and „teamwork" mean.
2. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Digital technics is of general importance in life: pupils should fully understand the importance of cooperation in a Digital Era.
4. Understanding of the notion „cooperation" is vital in general terms also: it makes pupils differentiate between group and team.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each. Debates or brainstorming over some concepts.

- The following themes are proposed for debates or brainstorming: If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

- For more innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides No 2 and 16. Are meant for short discussions and the summary of the discussion and the right short answers to those slides are on the next slides: No. 3. and 17-19. respectively.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using electronic version may become very effective
4. The electronic version may also contain tailor-made, simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**COOPERATION AND TEAMWORK**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to understand: • to learn the rules and standards of social coexistence; • to evaluate the contribution of cooperation and competition in a social group.
Materials needed:	Textbook, balloons or light balls, a board, a chalk, a pen, articles
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• cooperation • team work • group

PART II: Description of the lesson

Activity one: Motivational work

Procedure: At the beginning of the lesson, to motivate, we use an activity called ´Balloon don´t fall´. The teacher puts the children into pairs. Each pair will hold a balloon between them without using their hands with the aim of the activity of not letting the balloon fall. The balloon can travel from heads, to toes and back. The students will discover different ways of balancing the balloon head to head, hip to hip etc. The activity can be modified by using 2 -3 balloons or putting children into groups of 4 or 5.

The activity is followed by reflection when the teacher asks the following questions:

- **How was the activity?**
- **Was the activity easy or difficult?**
- **Did you like the activity?**
- **If yes, what did you like or dislike?**
- **What is the benefit of working in pairs?**

The activity is followed by a motivational conversation with key words such as cooperation, teamwork and a group.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity two: Exposure phase

Procedure: The students are familiarized with the terms in the below prepared text. Cooperation comes from the Latin word –cooperare - to cooperate; members of a group perform certain tasks, depend on each other and cooperate. The ability to cooperate is possible only in practical activities. Teamwork also known as work in autonomic work groups is a certain type of cooperation. Although there is a difference between the term group work (for example a class) and teamwork. Teamwork is the form of organizing work based on joint engagement, mutual collaboration and responsibility of all the members of the team to accomplish given tasks and reach a mutual goal.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- GAVORA, P. et al. 2012. How to develop text understanding in students. 2. vydanie. Nitra : ENIGMA, 2012. 193 s. ISBN 978-80-89132-57-7.
- HUPKOVÁ, M., PETLÁK, E. 2004. Selfreflexion and competences in teachers´ work. Bratislava : Iris, 2004. 1. vyd. 135 s. ISBN: 8089018777.
- TUREK, I. 2004. Innovations in didactics. Bratislava : MPC, 2005. 360 s. ISBN 80-8052-230-8.
- Picture resources for electronic version:
- https://www.bing.com/images/search?view=detailV2&ccid=JKtAW8Fy&id=CE8BA8FD35A17440CB55DA9536001A47E61CA5BE&thid=OIP.JKtAW8FyfEmo7nNurl40cgAAAA&mediaurl=https%3a%2f%2fwww.zeugnisdeutsch.de%2ffiles%2finhalte%2fkarriere%2fSkills.jpg&exph=336&expw=357&q=spolupr%c3%a1ca+a+t%c3%admov%c3%a1+pr%c3%a1ca+knihy&simid=608054362947324184&selectedIndex=1&ajaxhist=0
- https://www.bing.com/images/search?view=detailV2&ccid=Qnh9c%2fMm&id=CEEFAE9FC2E4F8456C145FF785195C498B059E21&thid=OIP.Qnh9c_MmXFnD17BPTirixAHaDt&mediaurl=http%3a%2f%2fwww.hernizakon.cz%2fwp-content%2fuploads%2fkreativita-ma-neomezene-moznosti.jpg&exph=294&expw=588&q=kreativita&simid=608033510933269404&selectedIndex=5&vt=3&iss=vs&imgurl=http%3A%2F%2Fwww.hernizakon.cz%2Fwp-content%2Fuploads%2Fkreativita-ma-neomezene-moznosti.jpg&ajaxhist=0
- https://www.bing.com/images/search?view=detailV2&ccid=6ChcNPHH&id=7FEC45D73DF3C1BC2B5241FA91D2787B0E989360&thid=OIP.6ChcNPHHDkFz9zgDug-dbQAAAA&mediaurl=http%3a%2f%2ffb.ru%2fmisc%2fi%2fgallery%2f20016%2f1419391.jpg&exph=300&expw=300&q=t%c3%admov%c3%a1+pr%c3%a1ca&simid=608003845600379029&selectedIndex=54&ajaxhist=0

B. DIVISION OF POWER IN THE DIGITAL ERA

POWER

Usually, power is the ability to do something. In society, power is more than that: **power is not only the ability to do something but also the capacity (ability) to persuade others to do something.** In some softer terms, the person who is powerful may also be called an “influencer”.

SEPARATION AND DIVISION OF POWER

If anybody (any group) has all the power in its hands, it may do in the society what it wants; there is no control over it. Such a system is called **dictatorship.** We know several dictators in history, like Hitler or Stalin.

Picture 17: Adolf Hitler

Picture 16: Joseph V. Stalin

Dictatorship is characterised by the fact that all power is concentrated in one hand (or in the hands of a small group). It may also be a so-called “de-facto dictatorship”, when different forms of power do exist and from outside, it looks like a “normal democracy” but the different kinds of power are heavily influenced (determined) by the “de facto dictator”.

The opposite political system is called **democracy.** Literally, it means “power of the people” (demos = people; cratos = power; Greek). The basic principle of democracy is

the separation of different kinds of power. It is necessary for control and with the division of power, nobody can concentrate power in one hand without control. It is usually the Constitution that states the principle of division (separation) of power.

In general, three basic forms of power exist:

- **Legislative power**. It is the organs that determine, accept and control the basic rules: the law. In democratic countries, it is the main organ which is the direct result of the people's opinion: The Parliament.

- **Executive power**; the Government. It is the de facto organ of ruling the country. The Government is ruled by the law and is responsible for the Parliament.

- **Judicial power**; the third independent organ that controls that the law is obeyed. It is the courts that fulfil those functions.

In democracy, those three branches of power are independent from each other**. It is called division of power.**

In some other democratic countries in the EU, the legislative power has "one house": the House of Representatives, what we usually call the Parliament; the head of the executive body is not the President, but the Prime Minister.

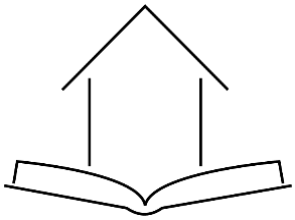
Separation of power and division of it is one of the basic principles of democracy. It is necessary for the power branches to control each other. That control is called "checks and balances". Without checks and balances, the political system is shifting closer to de facto dictatorship, even if "symptoms of democracy" are all formally available.

DIVISION OF POWER IN DIGITAL ERA

There are but a few dictatorships that remain till our days (even if the number of de facto dictatorships are higher.) Practically, 99% of all countries in the world call themselves democratic. That is, in all those countries, separation and division of power does exist – even if, in some “democratic” countries, just formally. It is also the case of today, in the Digital Era.

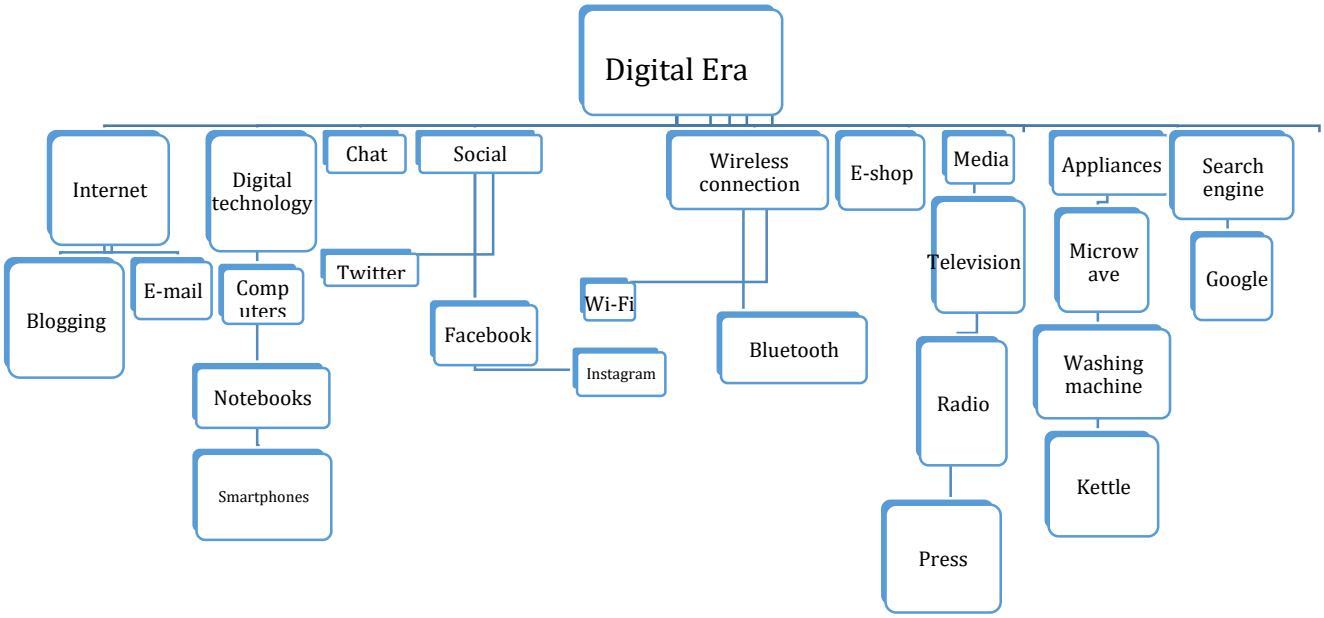
The Digital Era has brought fundamental changes to the issue in a different sense. As we saw above, the very basic power structure is the legislative branch, where the Representatives of the people sit, decide and vote. Representatives are elected by a regular voting procedure; usually four-five years. Voting –that is where the Digital Era has brought tremendous changes.

HOMEWORK SOLUTIONS



1. The teacher introduces the term digital era through conversation and the terms used in the motivational phase. With the help of a chart ready on the interactive whiteboard, the students fill in the missing terms**:**

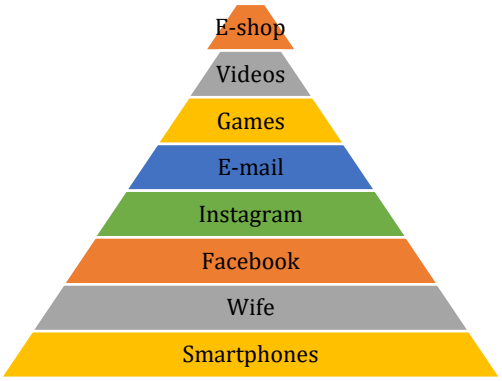
   Development of the assignment:



Picture 18: Digital era

In this phase the students create an 8 level pyramid according to their own life experience. Those who want to can read their pyramid to the rest of the class and explain why they chose those words for their pyramid.

Example:



Picture 19: Illustration pyramid

2. Jakub is a form 8 student. One day, during Civics lesson, the students were asked to find out what power is and what power in the digital era means. He thought his parents could help him with his homework, but they were at work and would come home late in the evening.

   He turned his laptop on and started to search. He found a lot of information about power in the digital era. He found out that our era is in fact the digital era and power is the ability of individuals or groups to carry out social activities and influence social processes such as thinking, communication, relationships, religion, culture, etc. for their own benefit regardless of the impact on other individuals. He carried on searching and found out that there are different types of power for example state power which includes legislative power, executive power, judicial power and people also talk more and more about media power. He started to feel curious and kept searching. He asked himself: ´If there are so many types of power, who holds power in their hands in the digital era? He found out that it could be individuals (politicians) and different social groups (political parties, different movements, religions, business companies). Their power rests in mastering digital technologies that become tools to influence public thinking and actions.

   There was a lot of information and he was not sure if he was doing things right. He contacted his classmate Miro on Facebook, who was also doing his homework, to find out what information he found. Miro sent him a link to a great video about how

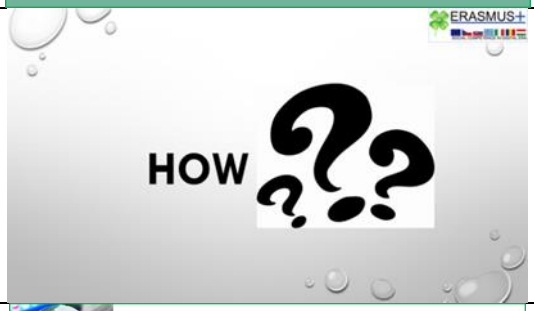
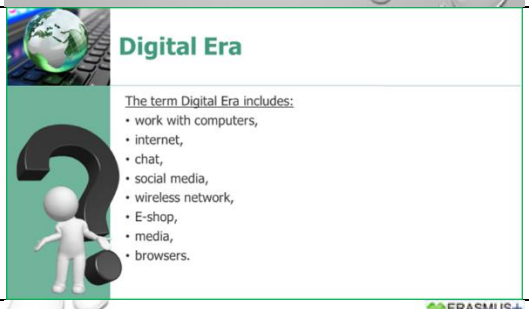
personal contacts and conversation between people protects us from being manipulated by individuals or social groups.

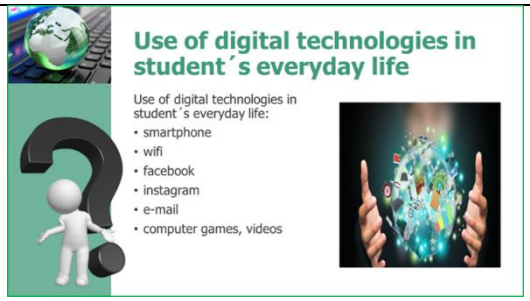
After he had done his homework, Jakub had some time to himself so he wrote to Miro and asked him to play a computer game with him (both from their own home). Miro did not have time, he had to go to football practice, but he asked another friend Teo through Facebook who was sick and could not go to football practice, to play. Teo agreed. Jakub was very happy in the evening, he had his homework done and he met a new fun friend Teo.

3. Every student has the article about Jakub in front of them and the students read it together. Write at least 5 advantages of the internet and social media that made it easier for Jakub to do his homework.

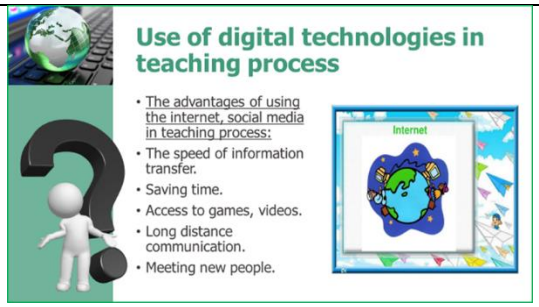
   Suggested answer: Jakub did not have to go to the library. The speed of information transmission. An option of watching a video. Availability of different games. Distance communication. Getting to know new people.

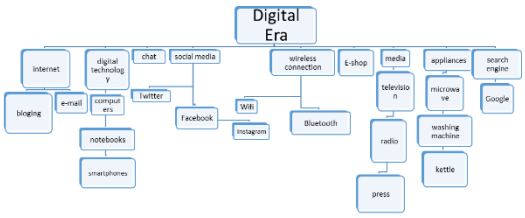
ELECTRONIC VERSION

SLIDES	NOTES
	
	


Use of digital technologies in student´s everyday life
Use of digital technologies in student´s everyday life:
• smartphone
• wifi
• facebook
• instagram
• e-mail
• computer games, videos

ERASMUS+
HOW ???


Use of digital technologies in teaching process
The advantages of using the internet, social media in teaching process:
• The speed of information transfer.
• Saving time.
• Access to games, videos.
• Long distance communication.
• Meeting new people.
Internet


Digital Era
internet
digital technology
chat
social media
wireless connection
E-shop
media
appliances
search engine
blogging
e-mail
computers
twitter
Facebook
Wifi
instagram
Bluetooth
television
radio
press
microwave
washing machine
kettle
Google
notebooks
smartphones

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. **The term digital era means:**
    a) the era, time that has passed
    b) **the era we live in**
    c) time period that's ahead of us, future

2. **What forms the base of the digital era?**
    a) New clothes, new fashion trends
    b) Exotic, unusual food
    c) **Digital technologies, people**

3. **Digital technologies can be used:**
    a) only at school
    b) only at home
    c) **in everyday life**

4. **What advantages does the digital era bring?**
    a) **Availability of large amount of information**
    b) power
    c) isolation

5. **What risks does the digital era bring?**
    a) tolerance
    b) fast transfer of information
    c) **power**

6. **Do digital technologies have:**
    a) positive power
    b) negative power
    c) **both positive and negative**

7. **In which instances can we talk about the positive power of the digital era?**
    a) **If it benefits everyone**
    b) If it benefits a political party regardless of an impact on an individual
    c) If it benefits a religious group

8. **In which instances can we talk about the negative power of the digital era?**
    a) **If a personal benefit of an individual or a group is emphasised**
    b) If a society benefit as a whole is emphasised
    c) If both personal benefit and society benefit is emphasised

9. **Attitudes, thinking, religion, culture cannot be influenced by:**
    a) media
    b) digital technologies
    c) **unmaterial subject**

10. **Internet:**
    a) **Enables us to access new knowledge**
    b) Does not allow us to access new knowledge
    c) Makes it difficult to access new information

YES – OR – NO QUESTIONS

1. Digital era influences the way we gain knowledge. **YES**
2. Is there a part of life that is not influenced by the digital era? **NO**
3. Can the power of the digital era be just positive? **NO**
4. Is studying an advantage in the digital era? **YES**
5. Is use of digital technologies important for future learning and professional development? **YES**

TRUE – OR – FALSE SENTENCES

1. Digital era influences our thinking, attitudes, opinions, culture, and religion. **TRUE**
2. All the information offered by digital technologies is true. **FALSE**
3. It is dangerous for our society to use power for the benefit of an individual or a group. **TRUE**
4. It is always an advantage of the digital era to use digital technologies. **TRUE**
5. Digital technologies carry a risk of abuse of power. **TRUE**
6. Digital technologies have only positive power. **FALSE**
7. Attitudes, thinking, religion, culture cannot be influenced by the media. **FALSE**
8. The Internet enables us to access new knowledge. **TRUE**
9. The use of digital technologies is important for future learning and professional development. **TRUE**
10. The term digital era means the era, time that has passed. **FALSE**

OPEN – END QUESTIONS

1. Why do we call present era the digital era and name 5 digital technologies that you know? (*Because of the digital technologies that surround us.)*
2. Name advantages of using the internet and social media. *(Erasing borders, keeping close contact with family and friends, access to information.)*
3. Characterize the term power. (*Nowadays, power is information.*)
4. Is it true that power in the present era is in the hands of politics? (*Yes*)
5. How can power be abused for the benefit of an individual or a group? *(By spreading propaganda and fake news.)*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what power in the digital era means.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion of power is vital in general terms also: it makes pupils understand that they must be active and know their rights.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**DIVISION OF POWER IN THE DIGITAL ERA**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to understand: • to determine the main reasons for social changes in society and their consequences.
Materials needed:	Foreign words dictionary, interactive whiteboard with a chart, note books, pens, chalk, and an article about Jakub.
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• digital era • power

PART II: Description of the lesson
Activity one: Motivational phase – Evocation **Procedure**: We use the INSERT method during an introduction lesson to reveal that the aim of our lesson will be to familiarize ourselves with the term digital era. Students´ job will be to think of the words that relate to the digital era using the letters from this term. Students can use a Foreign words dictionary during this activity. **Interaction:** T-Ss, Ss –T, Ss-Ss **Time to be allocated**: 10 min.
Activity two: Exposure phase

Procedure: The teacher introduces the term digital era through conversation and the terms used in the motivational phase. With the help of a chart ready on the interactive whiteboard, the students fill in the missing terms**.**

In this phase the students create an 8 level pyramid according to their own life experience. Those who want to can read their pyramid to the rest of the class and explain why they chose those words for their pyramid.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Fixation phase

Procedure: Every student has the article about Jakub in front of them and the students read it together. Then they write at least 5 advantages of the internet and social media that made it easier for Jakub to do his homework.

Suggested answer: Jakub did not have to go to the library. The speed of information transmission. An option of watching a video. Availability of different games. Distance communication. Getting to know new people.

The students answer 5 revision questions.

Interaction: T-Ss, Ss-T

Time to be allocated: 10 min.

Activity four: Diagnostic phase

Procedure: The teacher evaluates the lesson with the students.

Interaction: T-Ss, Ss – T

Time to be allocated: 5 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- KALAŠ, I. 2013. Changes in schools in digital era. Bratislava: SPN – Mladé letá, 256 s. ISBN 978-80-10-02409-4

- Picture resources for an electronic version: https://www.bing.com/images/search?view=detailV2&ccid=o5R49ObN&id=A134B40A38B36C7285B82C92D637B8FE0BFB985B&thid=OIP.o5R49ObNQENFI2IQqSZUXQHaGE&mediaurl=https%3a%2f%2fthumbs.dreamstime.com%2fz%2flogo-internet-4720961.jpg&exph=1065&expw=1300&q=internet&simid=608053147497990222&selectedIndex=28&ajaxhist=0

C. DEFENDING RIGHTS, INTERESTS, LIMITS AND NEEDS IN THE DIGITAL ERA

Picture 20: Balance between rights and duties

Every human being – simply because he/she exists - is entitled to perform some actions. Those "permissions" are called **rights.** In balance, every human being – simply because he/she exists in a society – is expected to obey some rules. Those rules are called **"obligations",** since everybody is obliged to keep those rules. Obligations are usually defined by law, as also rights. There are other "obligations" too that are "softer": they are not necessarily guaranteed by the law (i.e., they cannot be enforced) but still, the society expects all persons to obey those softer rules too. Those are usually called **responsibilities**, since persons have the moral responsibility to act accordingly. As an example, "do not steal" is an obligation and he who does not obey it will be punished by law; but "help those in need, show solidarity" is "only" a moral duty and if somebody does not obey it (i.e., does not help), usually cannot be punished. "Rights and obligations" (or as we often say: rights and responsibilities) should be in balance: everybody is expected to fulfil his/her obligations and is entitled to exercise his/her rights.

Moral judgement of the people often asks: and what if somebody does not fulfil his/her obligations and responsibilities, duties?! Does it lead to the person losing his/her rights too…?! There are contradictory answers to that question:

- **According to the law**, persons have rights practically without conditions. According to that rule, a person not obeying his/her obligations still has rights. "Murderers also have rights", we can say. Of course, there are cases when the law itself limits the ability to exercise one's rights: imprisonment of a

criminal limits the criminal's right for free movement. It is usually a result of a punishment for not obeying the law.

- **According to the moral judgement of the society**, he who does not fulfil his/her obligations, also loses his/her rights. Moral expectations demand balance of the rights and duties and if duties are not met, the person loses his/her rights.

Even if rights and obligations exist ever since human beings exist in a society, the rights were not formulated before the 20th century. Earlier, duties were well articulated but usually rights were oppressed or limited. Slaves, for example, practically did not have any rights. And it was in 1941, when the then president of the USA has announced his famous "Four Freedoms Speech" declaring the very basic human rights:

- freedom of speech (i.e. the right to express one's opinion)
- freedom of belief (i.e. the right to choose his/her religion)
- freedom from fear (i.e. right to security)
- freedom from need (i.e. the right to live a decent human life)

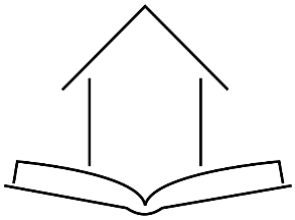
Every human being has smaller or bigger targets in his/her life. A smaller target may be not to be hungry today; while a bigger target may be, say, study and become an engineer. Anything that helps achieving the target is a support; and anything making meeting the target more difficult is an obstacle. Human beings strive to increase the amount of support and decrease the amount of obstacles**.** This "wish" is called "**interests":** people are interested in achieving their targets.

If every person has his/her own rights in the world, a question arises: are those rights limited or unlimited…? Regarding interests, we already mentioned above that since resources are limited, the interests of mankind cannot but be also limited. But what about the rights – I have the right of speech independently if there are 500 or seven billion people living on Earth – so, it seems as if rights are not limited.

In principle, the persons' rights are really not limited till it meets the rights of other persons. If I want to build a house in Hungary and another person wants to build one in Spain, our

rights do not “meet”, do not collide – our rights are not limited. But the situation is quite different if our rights are in conflict – I want to build a house and my neighbour also wants. Here, our rights are in collision. If our rights collide, we must make a compromise. (There is a saying: “The rights of my fist end at your nose” – i.e., I do not have the right to hit you.) Your right limits my right and vice versa: my rights may limit somebody else’s rights.

HOMEWORK SOLUTIONS



Exercise 1

The teacher will start a discussion with the students regarding their activities on the computer, while giving examples.

Exercise 2

Children will choose the pictures representing the environment that makes them feel safe.

Exercise 3

Each student has a prepared crossword puzzle in front of them with these hidden words: racism, grooming, cyberstalking, cyberbullying, phishing, videos, photos, abuse, happy slapping, and netiquette. A teacher has got the same crossword puzzle on the interactive whiteboard. Students are to find the words. Once they have found them they write them in their notebooks and the teacher explains the words

Grooming – is an expression for internet users who pretend to be someone else with the objective to hassle someone and abuse their trust. **Racism** – is a discrimination theory advocating inequality of races. **Cyberstalking –** is electronic stalking (profile following and insulting through social media). **Phishing** – is an activity when someone tries to get your bank account number, an email address etc. **Happy slapping** – is a recording of a criminal activity followed by spreading it with the help of social media. **Photos and videos** – the main risk of providing photos and videos is that they can get in the hands of the wrong people who can then misuse them. **Cyberbullying** (also called electronic bullying, e-bullying, online bullying) means insulting, threatening, revealing personal information or hassling someone with the help of modern communication tools, usually over a long timeframe.

G	R	O	O	M	I	N	G	D	R	V	D	A
S	A	A	P	Y	E	K	K	K	K	P	O	B
V	C	N	H	U	T	P	M	L	H	W	J	U
I	I	A	O	Q	I	R	B	I	L	F	K	S
D	S	D	T	J	K	D	S	L	W	A	L	E
E	M	I	O	K	E	H	F	K	L	I	Y	I
O	U	Š	S	O	I	A	G	O	H	Á	S	T
s	S	R	K	N	S	Q	O	P	I	E	R	I
D	P	E	G	G	C	S	P	D	B	D	D	E
C	Y	B	E	R	S	T	A	L	K	I	N	G
C	Y	B	E	R	B	U	L	L	Y	I	N	G
D	W	N	E	T	I	Q	U	E	T	T	E	F
H	A	P	P	Y	S	L	A	P	P	I	N	G

Exercise 4

The aim of exercise 4 is to understand the terms above when used in practical life examples. This activity is used to develop students´ critical thinking and ability to link a theory with practice. After they have read the text, the students say what risks occur and what rights are being violated.

- Extract - A friend you met on the internet suggests meeting somewhere private. When it is just the two of you, he starts talking about his hatred of Jewish people. He asks you if you have heard of the Holocaust. When you say yes, he says that it is all lies Jewish people made up and it never happened. He gives you a website address to prove he is right.

  Racism, violation of children rights (Declaration of children rights, principle 10 ´A child has to be protected from bad practice that can support racial, religious or any other form of discrimination´.

- (An extract from a fairy tale number 1 – A Secret Friend) One day a shepherd asked his helper what happened to one of his sheep that had a mobile phone. The helper said that the sheep had not spoken to anyone or looked at anyone. The old shepherd said that a wolf wanted young meat. The wolf started to write to the sheep online and promised to be her best friend and buy her new clothes if she told him her full name, the address, an email and sends a photograph. However, she is not allowed to tell anyone about their friendship. He also promised a new mobile phone if she meets him in the woods alone. The sheep lied to the shepherd and told him she was going for a walk. In fact she went to meet the wolf. The wolf saw her and wanted to hurt her, but a hunter walked by and saved her. Who knows what could have happened to the sheep?

  Grooming, Principle 2 - A child must be protected and provided with opportunities to develop physically, mentally, morally, spiritually and socially in a healthy way, in a free environment full of dignity.

  1. (Extract number 2 – Do not dance with a wolf) One evening, when the shepherd and his helper had gone to bed, the sheep had a party. The helper was woken up by a loud noise. He saw the sheep dancing and having fun. They did not notice that a wolf took photographs of them and showed them to his friends the following day. They laughed at the photos and mocked them. The noise was so loud, it woke up a hunter. He took the camera from the wolf. However, the wolf had enough information about the sheep and started sending her threatening messages.

Exercise 5

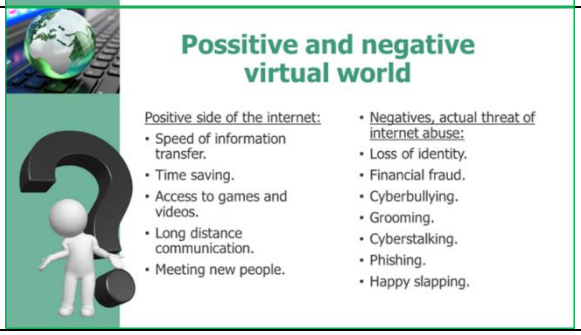
A teacher can lead a discussion about the exact read and analyse characters´ actions and behaviour. The teacher's goal is to get students to realize potential threats and to distinguish between the real and virtual world.

Students match the characters from the stories to the words that could be related to them (children, police, and help line, a violator of human rights, parent, teacher, teenager, and aggressor)

Exercise 6

Teacher can assign students **homework** to make a poster with **10 rules of how to behave on the internet.** Those who would like to, can make pictograms which symbolize good behaviour on the internet. After that students write the answers to 5 revision questions.

ELECTRONIC VERSION

SLIDES	NOTES
	

What can be taken advantage of?
• Personal details
• Bank details
• Photos, videos
• Social – economic circumstances

• Find hobbies, do not always sit behind ...
• Go out and play with your .....
• If you feel threatened, you can contact:
• Help line 116 ...
• Police
112

Finish the rules of good behaviour on the internet
• You never know who is on the other side, do not believe everyone and be .....
• If you are chatting to someone and arrange to meet them, tell your parents and never ....
• If someone is threatening you or forcing you to do something, do not respond and .....
• Do not give out your real name, phone number, address or ....
Only visit sites appropriate for .....Navštevuj len tie stránky, ktoré sú vhodné ...

ERASMUS+
YES!
YOU CAN!

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Netiquette:

a) Means the ability to master work with computers
b) **Is a complex of general rules of decent behaviour on the internet**
c) Includes the ability to communicate with people via the internet

2. A sign of racism is:

a) equality of races
b) **inequality of races**
c) tolerance

3. What can we be trapped by when it comes to the internet:

a) Facebook
b) smartphone
c) **grooming**

4. **The term grooming means:**
    a) Internet users with known identity
    b) **Internet users pretending to be someone else**
    c) Using digital technologies at work

5. **Watching a profile and insulting via social media is described by the term:**
    a) phishing
    b) happy slapping
    c) **cyberstalking**

6. **Recording a criminal activity and distributing it via social media is called:**
    a) cyberstalking
    b) **happy slapping**
    c) phishing

7. **Cyberbullying is:**
    a) Random insulting and blackmailing via social media
    b) **Long term insulting, blackmailing and harassment**
    c) Short term harassment, revealing private information with help of others

8. **Characteristic behaviour of a cyberbullying victim is:**
    a) **Solitude and isolation from a family and friends**
    b) the ability to master digital technologies
    c) confident behaviour

9. **What personal information should we never write or tell a strange virtual friend?**
    a) **Our real name, address, phone number, house number, family photos**
    b) Pets, favourite food
    c) Fake identity, fake address, fake house number

10. What are the characteristics of an aggressor?

a) Great use of digital technologies
b) **Manipulation, lie, promises**
c) Tolerance, openness, good relationships

YES – OR – NO QUESTIONS

1. Does the use of the internet only bring the negatives? **NO**
2. Are modern digital technologies helping you with your learning? **YES**
3. Does the development of digital technologies influence social co-existence? **YES**
4. Is violating human rights via social media a crime? **YES**
5. Is anonymity the biggest hurdle when trying to expose an aggressor or a crime? **YES**

TRUE – OR – FALSE SENTENCES

1. If I am the victim of cyberbullying, I as a child have rights. **TRUE**
2. I can contact the police in case of being abused and insulted via social media. **TRUE**
3. There is no risk if I put my personal details on the internet. **FALSE**
4. Social media makes lives and studying easier. **TRUE**
5. Modern digital era does not influence relationships? **FALSE**
6. Netiquette means the ability to master work with computers. **FALSE**
7. Cyberbullying is long term insulting, blackmailing and harassment. **FALSE**
8. The characteristics of an aggressor are manipulation, lie, and promises. **TRUE**
9. Recording a criminal activity and distributing it via social media is called phishing. **FALSE**
10. Characteristic behaviour of a cyberbullying victim is solitude and isolation from family and friends. **TRUE**

OPEN – END QUESTIONS

1. Name the risks of using the internet and social media. (*Grooming, cyberbullying)*
2. In what case can netiquette be jeopardized? (*When someone is not media literate.)*
3. What do these terms have in common: grooming, happy slapping, phishing, cyberstalking? (*They broke the netiquette.)*
4. Name help lines in case of violation of someone's rights. *(Child protection, police department)*
5. What are the positives of using the internet in the modern era? *(Access to information, keeping contact with family and friends.)*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand how they can defend their rights in the digital era.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion of right is vital in general terms also: it makes pupils understand that they must be active and know their rights and obligations.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of an electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. Electronic version may also contain tailor-made, simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**DEFENDING RIGHTS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to understand: • to realize the meaning and the influence of the internet and digital technologies in today's society; • to identify bullying and risks in the virtual world.
Materials needed:	Interactive whiteboard with a picture of a computer, a data projector, a blackboard with chalk, pictures, texts, notebooks, pens
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• netiquette • needs • risks of misuse of digital technologies • children rights

PART II: Description of the lesson

Activity one: Motivational phase – Evocation

Procedure: Brainstorming method helps a teacher introduce the topic and the aim of the lesson. A teacher has a picture of a computer prepared on the interactive whiteboard. A teacher asks the following question: What do you like doing on the internet the most? Students´ ideas are written on the board. At the end the teacher evaluates the ideas.

When do you feel safe?

There are 6 photographs. Students are supposed to say which one makes them feel safe (a family, a storm, a wild animal, a crossing, a school, a computer). The pictures were put

in this order on purpose. A family is expected to be rated positive, a storm and a wild animal negative (students can cross out these photos). A crossing is safe under certain restrictions. The aim is to start a discussion about using a computer and safety that goes with it.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 15 min.

Activity two: Exposure phase:

Procedure: Each student has a prepared crossword puzzle in front of them with these hidden words: racism, grooming, cyberstalking, cyberbullying, phishing, videos, photos, abuse, happy slapping, and netiquette. A teacher has got the same crossword puzzle on the interactive whiteboard. Students are to find the words. Once they have found them they write them in their notebooks and the teacher explains the words.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: Fixation phase

Procedure: The aim of exercise 3 is to understand the terms above when used in practical life examples. This activity is used to develop students´ critical thinking and ability to link a theory with practice. After they have read the text, the students say what risks occur and what rights are being violated.

Interaction: T-Ss, Ss-T

Time to be allocated: 5 min.

Activity four: Diagnostic phase

Procedure: The teacher evaluates the lesson with the students.

Interaction: T-Ss, Ss-T

Time to be allocated: 5 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- GAVORA, P. et al. 2012. How to develop text understanding in students. 2nd edition. Nitra : ENIGMA, 2012. 193 s. ISBN 978-80-89132-57-7.
- HARAUSOVÁ, H. 2011. How to teach subjects. Bratislava : MPC, 2011. 62 s. ISBN 978-80-8052-396-1.
- PETLÁK, E. 2012. Innovation in education process. 1st. edition. Dubnica nad Váhom : Dubnický technologický inštitút, 2012. 158 s. ISBN 978-89400-39-3.
- SITNÁ, D. 2013. Method of active teaching: group co-operation of students. 2nd edition. Praha : Portál, 2013. 152 s. ISBN 978-80-262-0404-6.

Picture resources for electronic version:

- https://www.bing.com/images/search?view=detailV2&ccid=rPXN0swQ&id=9BE6A86A6AC933C82CFD9DD217D02A30D96D515F&thid=OIP.rPXN0swQOJ_mEMZ9R16QcgHaHa&mediaurl=https%3a%2f%2fupload.wikimedia.org%2fwikipedia%2fcommons%2f1%2f1e%2fLogo-notruf-112-europaweit.JPG&exph=1600&expw=1600&q=112&simid=608038089374958681&selectedIndex=0&ajaxhist=0
- http://www.zodpovedne.sk/download/prirucka_deti_v_sieti_final.pdf

V. MASS MEDIA AND PUBLIC OPINION

A. MASS MEDIA AND ITS INFLUENCE

INFORMATION

Mass media and the communication process

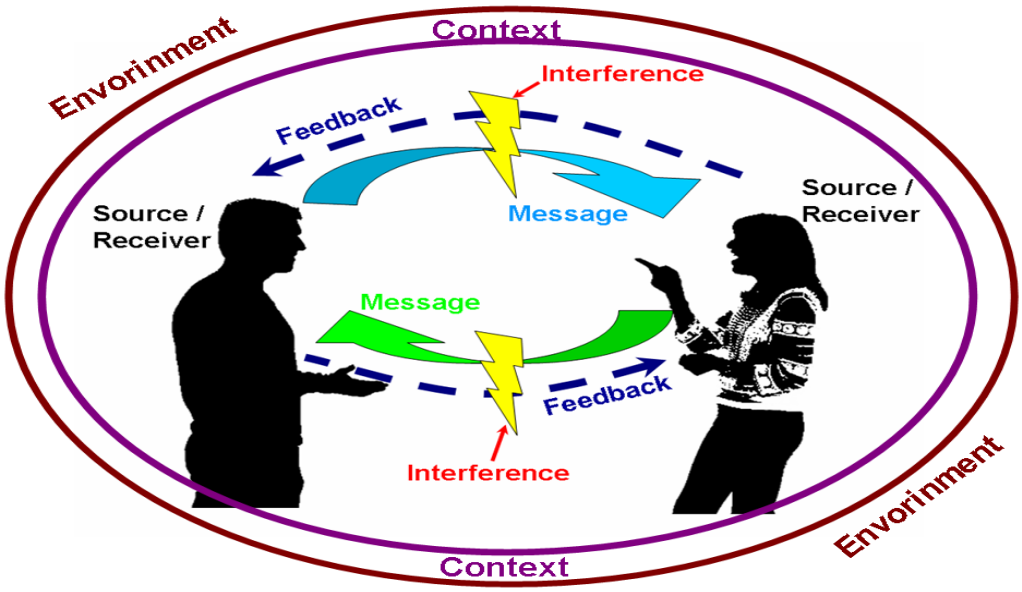
Mass media was born as a result of people's wish to communicate a large volume of information to a large number of people, in the shortest time possible.

Because its purpose is to pass on information, we must take into account the basic elements of communication.

a) **The sender** – is the individual that puts together, shapes and passes on information under the form of a message;
b) **The message itself** – represents the actual content that the sender intends to pass on and, besides data, it may consist of attitudes, feelings, body posture or face expressions;
c) **The receiver** – it is the person for whom the message was sent and it is his task to decode the information;
d) **Encoding** – consists of a system of symbols and signs used to pass on information, such as words, images, body posture, face expressions, the Morse code, the Braille alphabet and so on;
e) **The communication channel** – represents the means/media used to pass on the message and it may consist of air (in the case of spoken language), telephone, internet, radio, television (which, due to the large number of receivers, is nowadays called 'mass media');
f) **The context** in which the communication occurs – it is very important, because, depending on the circumstances, it may affect the efficiency of the communication process; thus, the places where a conversation may occur are numerous, including a room, a classroom, a telephone booth, the street and so on;
g) **Feedback** – it is an essential element of communication, because people communicate if and when they want to express something and received feedback

from the receiver assures the sender that his message has been sent and decoded correctly.

If we want to make a brief analysis of the evolution of mass media, we must take into consideration all the above mentioned elements.



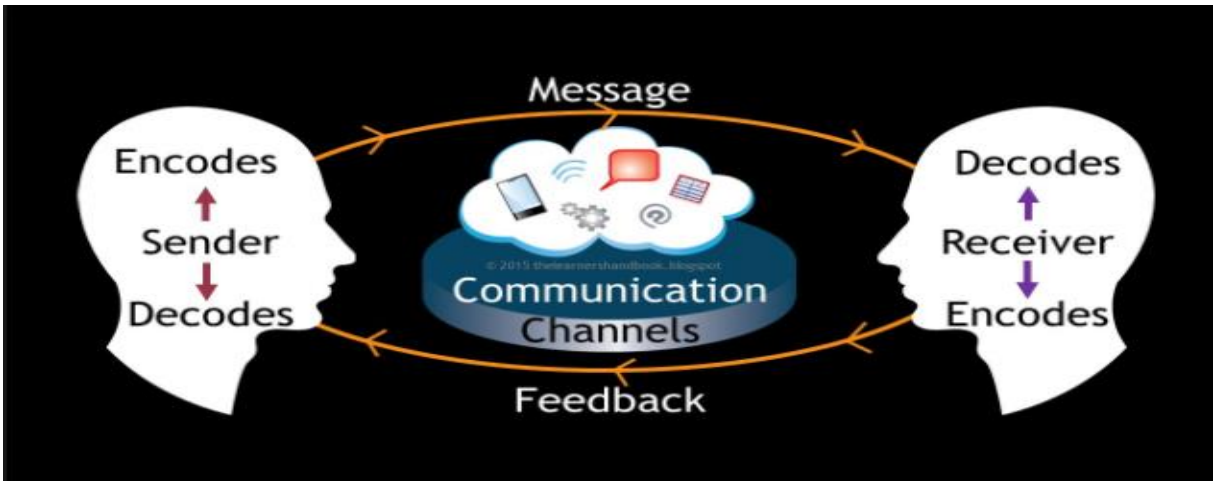
Picture 21: Components of the communication process

In its early beginnings, mass media was represented by pictures carved on cave walls, books and newspapers. Thus, the sender may have been one or a small group of people, but the receivers weren't many as well.

In what encoding is concerned, the system of symbols and signs used was quite basic and rudimental for the petroglyphs and a little more developed for books and newspapers.

Nowadays, the encoding has become so efficient, that even subliminal messages are being shaped and encoded in such ways that, sometimes, we don't even realize we are influenced to do things.

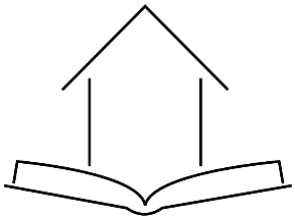
Regarding the content of early media, it was exclusively written and was intended to be seen or read. Thus, the communicational flow was made one way only: from the sender to the reader, without the possibility of receiving the receiver's feedback. Modern mass media comes with a twist and gives receivers the possibility to express their feelings and opinions publicly. For example, if an online newspaper or television channel posts a news article, the audience may offer feedback by typing opinions on the senders' website. Or, if someone posts a song on YouTube, comments will soon follow, showing appreciation towards the artist's work. Thus, modern mass media has a bidirectional information flow: from sender to receiver and vice versa.



Picture 22: Communication process

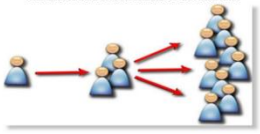
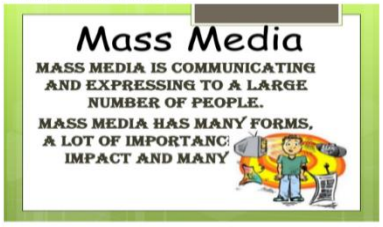
Finally, the communication channel divides mass media in two major categories: the early media (books, newspapers, images) and the broadcasted media (which transmits the information electronically).

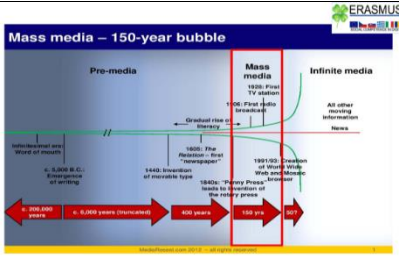
HOMEWORK SOLUTIONS



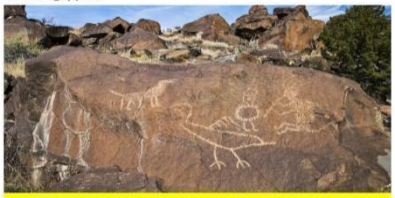
1. Information, as stated on https://www.merriam-webster.com/dictionary/information, represents the communication of knowledge or intelligence. In other words, in a time of speed, information gives power to the one who has it.
2. Mass media represents information that reaches and influences large numbers of people. In other words, mass media consists of television, radio, newspapers, internet, email and so on.
3. The early forms of mass media are the petroglyphs, which are rock drawing and carvings. They were used to leave messages for the others.
4. The inventor of the printing press was Johann Gutenberg.
5. After obtaining an on-line information, we should always check its source and its authenticity.

ELECTRONIC VERSION

SLIDES	NOTES
TOPIC 5. MASS MEDIA AND PUBLIC OPINION MODULE A. **MASS MEDIA AND ITS INFLUENCE**	
The world is evolving, and it is evolving fast. Information is vital. Mass media is indispensable. WHY? Because the speed by which information travels, influences the effectiveness of our actions. 	
What is mass media?  Mass Media MASS MEDIA IS COMMUNICATING AND EXPRESSING TO A LARGE NUMBER OF PEOPLE. MASS MEDIA HAS MANY FORMS, A LOT OF IMPORTANC IMPACT AND MANY	
Mass media throughout time 	



Petroglyphs



The early attempts of mankind to communicate.

Roman gladiator games

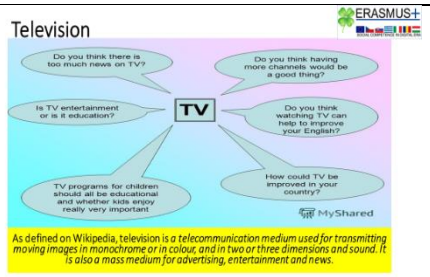
The first attempts to broadcast live and simultaneously a specific form of media to a wider audience.

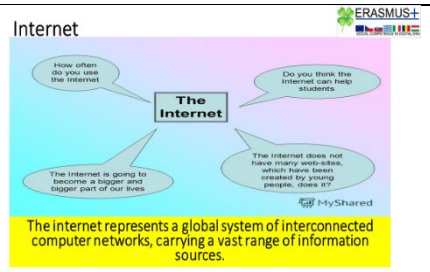
First printing press

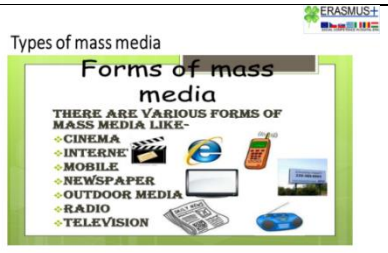
In the 1440's, Guttenberg's printing press lead to the spreading of books on a large scale, making information accessible to everyone.

The first newspaper appeared in the 15th century, soon after the invention of the printing press.

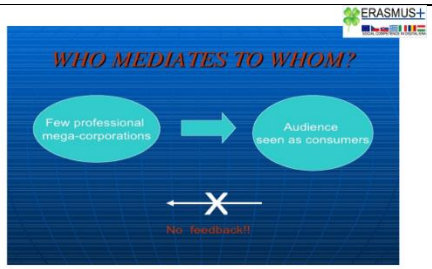
ERASMUS+
NEWS
Newspapers
Newspaper is a paper printed and sold usually daily or weekly with news, advertisements etc.
THE TIMES
Penalty points double for speeding drivers
GAZETTE
The first newspaper appeared in the 15th century, soon after the invention of the printing press.

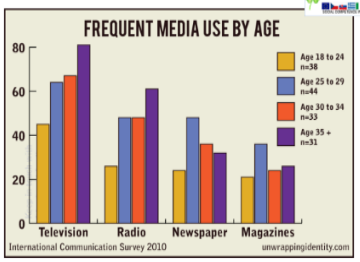

Television
ERASMUS+
Do you think there is too much news on TV?
Do you think having more channels would be a good thing?
Is TV entertainment or is it education?
TV
Do you think watching TV can help to improve your English?
TV programs for children should all be educational and whether kids enjoy really very important
How could TV be improved in your country?
MyShared
As defined on Wikipedia, television is a telecommunication medium used for transmitting moving images in monochrome or in colour, and in two or three dimensions and sound. It is also a mass medium for advertising, entertainment and news.


Internet
ERASMUS+
How often do you use the Internet
Do you think the Internet can help students
The Internet
The Internet is going to become a bigger and bigger part of our lives
The Internet does not have many web-sites, which have been created by young people, does it?
MyShared
The internet represents a global system of interconnected computer networks, carrying a vast range of information sources.


Types of mass media
ERASMUS+
Forms of mass media
THERE ARE VARIOUS FORMS OF MASS MEDIA LIKE-
CINEMA
INTERNET
MOBILE
NEWSPAPER
OUTDOOR MEDIA
RADIO
TELEVISION

The influence of mass media
ERASMUS+
MASS MEDIA: GOOD OR BAD?

ERASMUS+ Questions to answer?: Which of the mass media is the most useful? Why? Which is your favourite? Why? What are the advantages and disadvantages of these means of communication? MyShared	
ERASMUS+ ARE YOU ONLINE SAFETY AWARE? CYBER SAFETY Be SMART online: • Stay safe – don't share personal information! • Don't meet – with anyone you've met online! • Accepting files – from unknown sources can be dangerous! • Reliable – always check the source of information or the person's background! • Tell someone – if you feel bothered by someone or something! SMART	
ERASMUS+ FACTS about mass media • Mass media is ALL AROUND US. From the moment we wake up, we are surrounded by it (TV, internet, radio, books, newspapers) • Mass media is MASSIVE. For instance, a newspaper can sell thousands of copies in a day, while a TV programme can be watched by millions of viewers simultaneously. • Mass media MEDIATES between the sender/the broadcaster and the receiver/the audience.	
 ERASMUS+ WHO MEDIATES TO WHOM? Few professional mega-corporations Audience seen as consumers No feedback!!	



Conclusion

If we understand mass media,
We can be CRITICAL.
If we are critical,
We can't be MANIPULATED!

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is mass media?

a) a cultural game
b) **sources of information, that influence large numbers of people**
c) a Stephen King's novel
d) electronic circuits
e) a governmental document

2. Mass media consists of:

a) television
b) newspapers
c) internet
d) radio
e) **all of the above**

3. **The first forms of mass media belong to:**
    a) grandparents
    b) teachers
    c) soldiers
    d) **prehistoric people**
    e) friends

4. **During Ancient Roman Empire, the so-called ‘munera’ represented;**
    a) circus shows
    b) **gladiator battles**
    c) video games
    d) religious ceremonies
    e) drama plays

5. **In the 1440’s, Johannes Guttenberg invented:**
    a) **the printing press**
    b) the washing machine
    c) the sewing machine
    d) the radio
    e) the telescope

6. **The forms of mass media that provided entertainment besides information were:**
    a) radio
    b) television
    c) video
    d) **all of the above**
    e) cave paintings

7. **During World War II, mass media was used to:**
    a) play music to entertain people
    b) to announce the weather forecast
    c) to send food packages to the soldiers
    d) **to provide information regarding the progress of the fighting**
    e) it has not been used at all

8. **Fake news represents:**
    a) a joke
    b) a novel
    c) a song
    d) **news that intentionally mislead people**
    e) a cartoon

9. **Who can broadcast media content nowadays?**
    a) the police
    b) the government
    c) the teachers
    d) the economists
    e) **anybody**

10. **When we find online information, we should:**
    a) share it
    b) **verify it**
    c) tell our friends about it
    d) believe it
    e) ignore it

TRUE – OR – FALSE SENTENCES

1. Mass media appeared as a result of people's wish to communicate. **TRUE**
2. Cave paintings and rock carvings represent early forms of mass media. **TRUE**
3. The Buddhist 'Diamond Sutra' book is a modern philosophy treaty. **FALSE**
4. The invention of the printing press made the information available to everyone. **TRUE**
5. Online information can be accessed on websites, using search engines. **TRUE**
6. During communism, mass media was used to show real life issues and to criticize the authorities. **FALSE**
7. Mass media can influence people's perceptions and behaviour. **TRUE**
8. Radio, television and video were unpopular because they were boring. **FALSE**
9. The archaeological evidence found in Africa suggests that our ancestors had knowledge of chemistry and production. **TRUE**
10. The term 'media', defined by Longman's Exams Dictionary, refers to the circumstances in which a conversation takes place. **FALSE**

OPEN – END QUESTIONS

1. What is the aim of the early mass media forms? *(To broadcast live and simultaneously a specific form of media to a wider audience.)*
2. Why did radio, television and video become so popular? *(Because it was easier for the masses to receive the information by audio-visual means, than to read it.)*
3. Which is the main objective of mass media? *(To keep us up to date with the news.)*
4. What are the conditions for broadcasting media content? *(Having a phone or a computer with an internet connection.)*
5. What kind of activities can the internet provide for its users? *(Listening to music, watching videos, gaming and social networking.)*

OPEN – END SENTENCES

1. The so-called ‘ludi scaenici’ were … *(drama plays performed in huge amphitheaters).*
2. The ancient shows represent the first attempts to broadcast … *(a specific form of media to a wider audience, live and simultaneously).*
3. The term ‘media’, defined by Longman’s Exams Dictionary, represents … *(organizations that provide news and information for the public).*
4. When we talk to somebody, we … *(expect to receive feedback from that person).*
5. We should never believe the information delivered to us, without … *(verifying its author and its authenticity).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what „media” and „mass media” mean.
2. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The mass media is of general importance in life: pupils should fully understand that whatever they do, and use their mobile phone or computer, they are using mass media.
4. Understanding of the notion „media influence” is vital in general terms also: it makes pupils understand that they must be aware what ’’fake news” means and what consequences it has.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides No. 11, 12, 14, 15 are meant for short discussions and brainstorming activities.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just samples; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**MASS MEDIA AND ITS INFLUENCE**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise: • what “mass media” is; • which were the chronological forms of media; • the way in which mass media can be used to influence people; • the ‘’fake news’’ phenomenon.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• information • media • mass media influences • modern mass media

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss’ mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **Do you use information?**
- **What do you think information means?**
- **Where do you get your information from?**

- **Do you know what mass media is? Can you include your information sources in the category of mass media?**

Teacher makes sure that students understand what “mass media” is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 5 min.

Activity two: Presentation

Procedure: The teacher uses the **Power Point Presentation Chapter 5, Module A: *Mass media and its influence***, which offers a presentation of mass media and a wide range of examples. Further, the teacher will encourage discussions and debates over the topic.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: How can we protect ourselves from the negative media influence?

Procedure: Students discuss the question; it can also be in the form of a brain storming. The teacher speaks about the defensive techniques and strategies that children can use online.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 5 min.

Activity four: Practical exercise

Procedure: Teacher presents to the students a worksheet on which they will have to answer questions related to media. Also, students will make their own petroglyphs. (See Annex 1)

Interaction: T-Ss, Ss-Ss **Time to be allocated**: 10 min.
Activity five: Summary of the module, discussion of a possible homework **Procedure**: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework. **Interaction:** T-Ss **Time to be allocated**: 4 min. **Evaluation of class working** **Time to be allocated:** 1 min.

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brain storming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

Annex 1

WORKSHEET

Exercise 1.

The following image represents a petroglyph found near the Puerco Pueblo ruins. It is believed to have been created by the Pueblo Indians during the 12th or the 13th Century.

Picture 23: The petroglyph

Please study the image carefully and try to answer to the following questions:

1. Where was this petroglyph found?

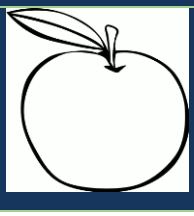
2. Who is the author of it?

3. What do you see in this petroglyph?

4. What message do you think the creators of the petroglyph were trying to communicate?

Exercise 2.

Look at the symbol-chart and use it to create your own petroglyph, in order to send your message to the others. In the top row, you will write a word, and on the bottom, you will draw the symbol that you think is suitable for the word you have chosen. When you finish, paint the symbols to the flat side of a rock.

USED AND RECOMMENDED SOURCES

- http://www.assignmentpoint.com/arts/sociology/presentation-on-mass-media.html
- Gladiator https://www.india.com/buzz/top-3-barbaric-entertainment-of-the-past-35216/
- http://profshistoirelcl.canalblog.com/archives/2013/03/08/26631607.html
- https://www.posticbates.com/blog/identify-undue-influence-in-estate-planning
- http://www.coeurdecible.fr/web/acquisition-clients-sur-le-web-070213
- https://spectrum.ieee.org/tech-talk/aerospace/satellites/facebook-may-have-secret-plans-to-launch-a-internet-satellite
- http://www.freeonlinenotes.net/process-of-communication/
- http://katekei.com/basic-components-of-communication/
- http://scienceviews.com/indian/puercopetroglyphs.html
- https://www.ancienthistorylists.com/wp-content/uploads/2014/11/Sulawesi-Cave-Art-37900-BCE.jpg
- http://eclecticquilt.blogspot.com/2010/10/jablckovy-kolac.html
- http://windynookprimary.org/2018/09/mrs-broomhalls-morning-groups-homework/

B. MEDIA LITERACY

INFORMATION

Media education

"*Media education is a quest for meaning. Much of the value of a quest lies in the search itself as well as in the achievement of the goal*." - Chris Worsnop [8]

Picture 24: Working classroom

The term 'media literacy', (as defined on https://en.wikipedia.org/wiki/Media_literacy) encompasses the practices that allow people to access, critically evaluate, and create media. In other words, someone who is media literate is able to filter the information received.

With the constant development of the digital world and the huge volume of information that is available for the young generation, teachers must find new ways to prepare students for life and to keep up with current trends. Thus, media education is now being included in worldwide curricula. Here are a few ways of teaching media literacy to the children:

1. **Recognize fake news** – As fake news, also known as rumours, have the tendency of spreading faster than real news, it is crucial for students to be able to distinguish between them. Thus, children will be encouraged to:

[8] https://www.medialit.org/how-teach-media-literacy

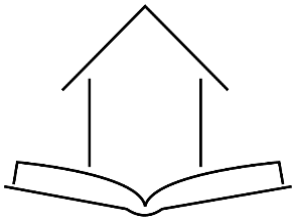
- read past the headlines;
- always search for the information's publication date (for example, if we read an article written fifty years ago, not only it may prove useless, but it may also mislead us);
- check the author's credentials.

2. **Use multiple sources** – The best way to identify fake news is to check various sources that present the same information. As momentous news gets coverage by multiple media broadcasters, this shouldn't be difficult. Besides, receiving the same news from different perspectives provides a more accurate knowledge.
3. **Pay attention to the tone and language used in the article** – An academic language sounds better than a fancy or abstract one. Yet, this doesn't always mean that it is true. It is crucial to help students develop an 'ear' for the non-credible language.
4. **Question numbers and figures** – Don't believe everything you see, hear or read. Find out if the information provided has been applied or refers to a small number of people or to large crowds. For example, a research study applied to ten persons will not have the same accuracy as the studies applied to ten thousand people.
5. **Filter images** – Due to the visual cortex, visual media can have a great impact on its receivers. Thus, it is necessary to filter the images twice:
   - to see the immediate reaction it produces;
   - understand the influence that image is supposed to have upon your behaviour;
6. **Recognize bias** – The teacher should help students identify the sources which broadcast only certain themes or aspects of life. This phenomenon can be mainly found in political and fashionable news. For example, if a politician or an actor has already been considered as mean or malicious, it takes one fake news to increase this public perception.
7. **Shape the media content according to our own principles and ethical values** – This means that students will be taught not to comply with the news they receive. The news is meant to serve people and not the other way around!

Filter the data – According to https://www.canva.com/learn/10-creative-methods-to-teach-media-literacy/, a person would need 57.000 years to read all the information

available on the internet. In these conditions, it is obvious that we need to filter thoroughly the data we are handling.

HOMEWORK SOLUTIONS



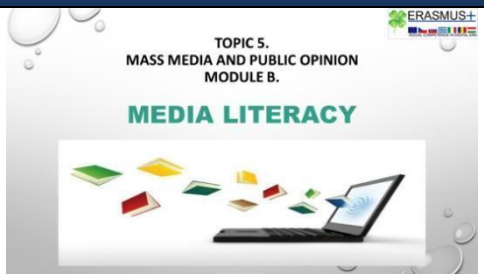
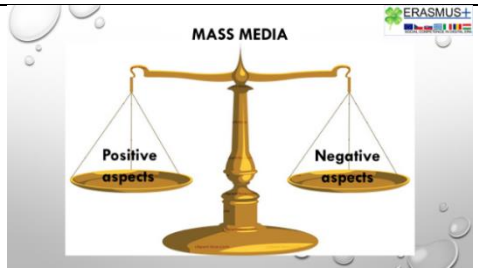
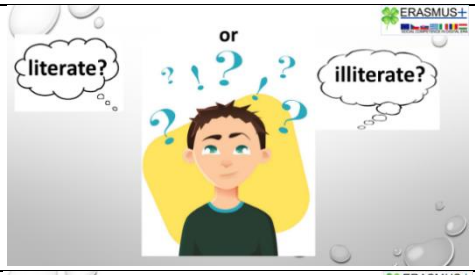
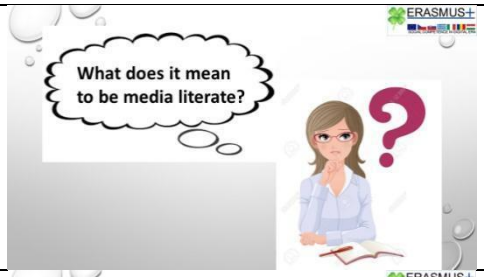
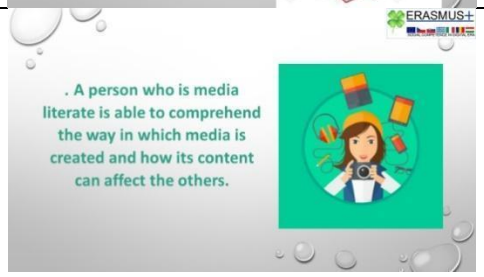
1. The Longman Exams Dictionary defines literacy as *the state of being able to read and write*.

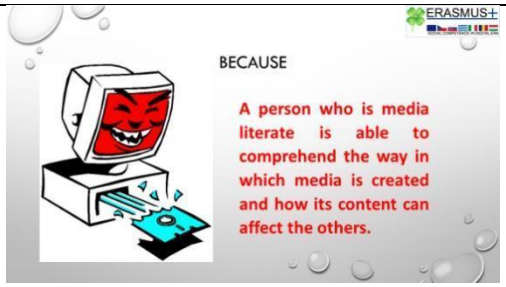
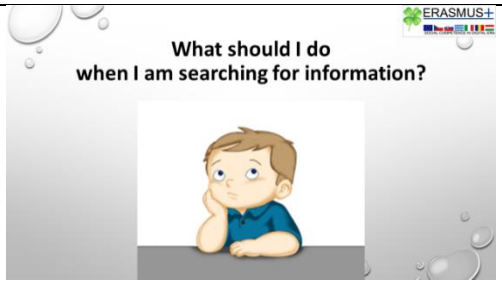
2. 'Media literacy' *encompasses the practices that allow people to access, critically evaluate, and create media.*

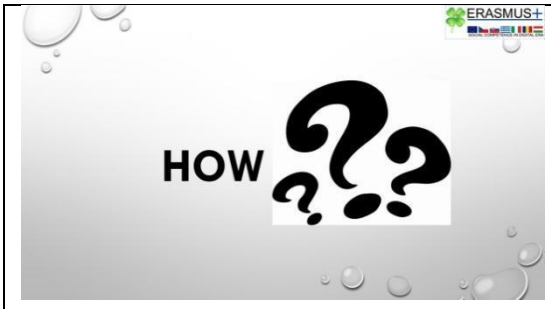
3. The five dimensions of media literacy are: access, analyse, create, reflect and take action.

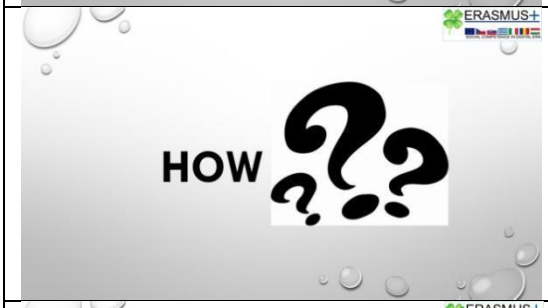
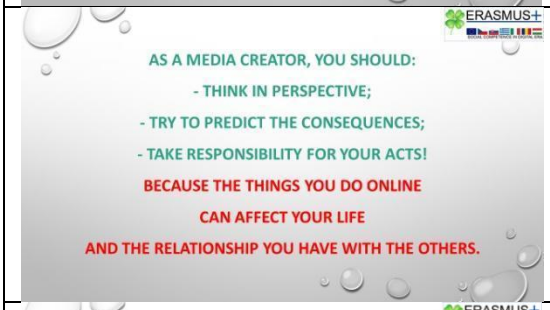
4. Before creating media content, we must always take into consideration the ethical principles and social responsibility.

ELECTRONIC VERSION

SLIDES	NOTES
	
	
	
	
	

ERASMUS+ Why is it important to be a media literate student?	
 ERASMUS+ BECAUSE A person who is media literate is able to comprehend the way in which media is created and how its content can affect the others.	
 ERASMUS+ What should I do when I am searching for information?	
ERASMUS+ 1. ACCESS the information ACCESS	
ERASMUS+ 2. ANALYZE IT confirm prove justify verify attest clarify check inspect document	

 ERASMUS+ HOW ???	
ERASMUS+ RECOGNIZE FAKE NEWS USE MULTIPLE SOURCES PAY ATTENTION TO THE TONE AND LANGUAGE USED QUESTION NUMBERS AND FIGURES FILTER IMAGES RECOGNIZE BIAS FILTER THE DATA	
ERASMUS+ 3. CREATE your own media content	
ERASMUS+ HOW ???	
ERASMUS+ Dare! Write an article! Compose a song! Take pictures! Record a movie! Post it! Share it!	

ERASMUS+ 4. REFLECT upon your online actions		
 ERASMUS+ HOW ??		
 ERASMUS+ AS A MEDIA CREATOR, YOU SHOULD: - THINK IN PERSPECTIVE; - TRY TO PREDICT THE CONSEQUENCES; - TAKE RESPONSIBILITY FOR YOUR ACTS! BECAUSE THE THINGS YOU DO ONLINE CAN AFFECT YOUR LIFE AND THE RELATIONSHIP YOU HAVE WITH THE OTHERS.		
ERASMUS+ 5. ACT TAKE ACTION!		
ERASMUS+ HOW? Don't be passive! Speak for yourself! Take action!		

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What does literacy mean?

a) a cultural game
b) literature
c) **the ability of reading and writing**
d) a news magazine
e) when someone doesn't know to read and write

2. How many types of literacy do you know?

a) visual literacy
b) story literacy
c) computer literacy
d) media literacy
e) **all of the above**

3. Media literacy:

a) **encompasses the practices that allow people to access, critically evaluate, and create media**
b) refers to airplanes industry
c) was invented two hundred years ago
d) is a mathematical term
e) helps people to play music

4. Someone who is media literate is able to:

a) read the newspaper
b) play video games
c) watch commercials
d) **comprehend the way in which media is created and its influence**
e) watch television

5. The five dimensions on which media literacy is based on are:

a) access
b) analyse and evaluate
c) create
d) reflect
e) **all of the above**

6. Having textual power means that:

a) the media content created actually represents a meaningful form of communication
b) that the media creator should always put in relation the content and the form of the message
c) **all of the above**
d) the media creator can create whatever he or she pleases
e) people should create only written media

7. Taking action means:

a) **to do something for the benefit of the others**
b) to be passive
c) to practice sports
d) to watch movies
e) to talk to the others

8. When we reflect upon the media we create, we must:

a) pay attention to the length of the media
b) having an impulsive behaviour
c) **take into consideration the ethical principles and social responsibility**
d) use as many photos as possible
e) always provide our name

9. From 2017 to 2019, the number of people using the internet has increased by:

a) 2000 users
b) **320 million users**
c) 45 million users
d) 2 billion users
e) The number of internet users has dropped

10. The majority of retail companies promote their business on:

a) **social media networks**
b) newspapers
c) television
d) radio
e) books
f) from door to door

TRUE – OR – FALSE SENTENCES

1. The term ‘literacy’ refers to someone’s capability of reading a written word. **TRUE**
2. Someone who is media literate is able to comprehend the way in which media is created and how its content can affect others. **TRUE**
3. Accessing media means going into the computer room and using the control panel. **FALSE**
4. When creating media content, the media creator should always put in relation the content and the form of the message. **TRUE**
5. When reflecting upon the media content we create, we should ask for our friends’ opinion. **FALSE**
6. By taking action, we can make a difference in the world. **TRUE**
7. The internet can be used for social network applications, online shopping, financial transactions, or to create our own media content. **TRUE**
8. There are 7.7 billion internet users worldwide. **FALSE**
9. Every 60 seconds, a new social media user is registered. **FALSE**
10. The best way to fight against aggressive marketing and even subliminal shopping messages is to become media literate. **TRUE**

OPEN – END QUESTIONS

1. What does computer literacy mean? (*It represents a person’s ability to read, write, send and receive information by means of a computer).*
2. What does accessing information involve? *(It involves gathering information, comprehending it and using the adequate technology tools to handle the information*).
3. What does the user have to verify when analysing media content? (*It means that the media user must verify the quality, veracity, purpose and the potential consequences of the information).*
4. Which are the various ways in which people are able to communicate by means of mass media? (*People can be reading a newspaper, listening to the radio, watching television or browsing the internet).*

5. What can we use the internet for? *(The internet can be used for social network applications, online shopping, financial transactions, or to create our own media content).*

OPEN – END SENTENCES

1. Citizens, as creators and receivers of mass media, can work individually or in collaboration with other people, to solve … (*local, national or international issues).*
2. The digital composition gives the media user the chance of using creativity and self-expression, but … (*It also brings together people from around the world*).
3. The marketing giants can collect, store, analyse and process our online activity, in order to … (*Find out information regarding our online habits, including shopping preferences).*
4. On social networks, an individual spends an average time of … (*116 minutes per day).*
5. The best way to fight against aggressive marketing and even subliminal shopping messages is … (*To become media literate*).

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what ''media literacy" and ''media content" mean.
2. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Media literacy is of general importance in life: pupils should fully understand that whatever they post online, it may affect their real life.
4. Understanding of the notion ''media influence" is vital in general terms also: it makes pupils understand that they must be aware what ''fake news" means and what consequences it has.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Most of the slides are meant for short discussions and brainstorming activities.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.
8. The main target of this module is for the pupils to understand what „media literacy" and „media content" mean.
9. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
10. The mass media is of general importance in life: pupils should fully understand that whatever they do, and use their mobile phone or computer, they are using mass media.
11. Understanding of the notion „media content" is vital in general terms also: it makes pupils understand the responsibility they have when creating media content and the consequences it has.

12. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**MEDIA LITERACY**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to understand : • what 'literacy' is; • what 'media literacy' means; • what is a media literate person; • which are the dimensions of media literacy.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• media • media literacy • media content

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks students to bring their own shower gel, after which he asks the question below and gets their opinions:

- **Analyse the packaging for the body wash you brought.**
- **Who or what is included in the message?**

- **What type of people are you invited to identify with?**
- **Is the gender of the user represented fairly?**
- **Is there another perspective that can be applied to the product?**
- **Which are the missing points of the product's message?**

Teacher makes sure that students understand what "media literacy" is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 5 min.

Activity two: Presentation

Procedure: The teacher uses the **Power Point Presentation Chapter 5, Module B: *Media literacy***, which offers a presentation of media literacy and its dimensions. Further, the teacher will encourage discussions and debates over the topic.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: What should we take into consideration when we create media content?

Procedure: Students discuss the question; it can also be in the form of a brain storming. The teacher speaks about the ethical principles, responsibility and the consequences of children's online actions.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 5 min.

Activity four: Practical exercise

Procedure: Teacher presents to the students a postcard. The children will have to express their opinion about it. The teacher will lead the discussion towards the message of the card and its dual interpretation. Also, students will make their own dual meaning postcard. (Annex 2)

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

Annex 2

Picture 25: A wish card

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- https://books.google.ro/books?id=iEuXCgAAQBAJ&printsec=frontcover&dq=media+literacy&hl=ro&sa=X&ved=0ahUKEwisipjLxurfAhVQM-wKHSBzDFgQ6AEIJzAA#v=onepage&q=media%20literacy&f=false
- https://books.google.ro/books?id=UHPOUDLbLMwC&printsec=frontcover&dq=media+literacy&hl=ro&sa=X&ved=0ahUKEwisipjLxurfAhVQM-wKHSBzDFgQ6AEILzAB#v=onepage&q=media%20literacy&f=false
- https://books.google.ro/books?id=Dotyx3X3QaIC&printsec=frontcover&dq=media+literacy&hl=ro&sa=X&ved=0ahUKEwisipjLxurfAhVQM-wKHSBzDFgQ6AEIVDAG#v=onepage&q=media%20literacy&f=false
- https://books.google.ro/books?id=vhFBMQH8jgIC&printsec=frontcover&dq=media+literacy&hl=ro&sa=X&ved=0ahUKEwisipjLxurfAhVQM-wKHSBzDFgQ6AEIbTAJ#v=onepage&q=media%20literacy&f=false
- http://iso27001guide.com/annex-a/access-control/business-requirements-access-control/iso-27001-access-control-policy-examples/
- https://www.brandwatch.com/blog/amazing-social-media-statistics-and-facts/
- http://www.kuripotpinay.com/2015/06/how-to-afford-expensive-purchases.html
- https://mastersofmedia.hum.uva.nl/blog/2013/09/07/the-failure-of-interactive-whiteboard/
- http://dimbe.org/index.php?p=editarticle&suiteArt=21
- https://www.videoblocks.com/video/close-up-fingers-typing-on-keyboard-buttons-young-white-caucasian-mans-hands-rt7kthqfeiw2r6s51

C. VIRTUAL SOCIETY, ALTERNATIVE REALITY

Most of us are visual learners. This means that we learn best by visualizing things. During traditional lessons, the teacher would stand in front of the students, make a drawing or display a picture, the pupils would watch and learn. Not all in the same manner and not everything! In these circumstances, it has become obvious to everyone that education must keep track with modern trends. Soon, the development of science and technology has made its presence in classrooms as well.

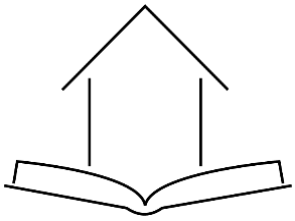
Such an example is the use of virtual reality tools during lessons. The instruments provide an interesting way of acquiring information and, let us not forget, nowadays students are fascinated with everything digital or virtual. When combining graphical technology with an intuitive interface and explorative approach, the success of the lesson will be guaranteed.

Teachers should combine virtual reality with classic teaching methods, in order to obtain mixed learning packages when explaining difficult theories in the classroom. It helps students to make a visual idea or to visualize the issues explained.

Below is a list of reasons why every teacher should at least try to use virtual reality in the classroom:

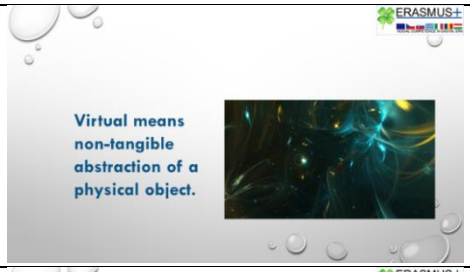
- It allows students to travel to foreign places and environments, in a controlled way, without them having to leave the comfort zone of their classroom;
- It can help develop empathy towards each other and towards poor communities;
- It gives pupils the chance to experience different jobs and occupations (for example, someone who wants to become a doctor, can perform a virtual surgery);
- It can be used for exploring the universe;
- It can be used for time travelling, in order to help children understand historical key events;
- It can help students understand the way in which their body works;
- It allows students to create their own virtual realities and share it with their colleagues;
- It promotes exploration and curiosity. Virtual reality is at the disposal of teachers who dare to transform the acquisition of knowledge into a fascinating journey.

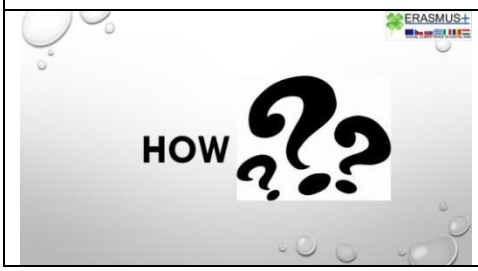
HOMEWORK SOLUTIONS

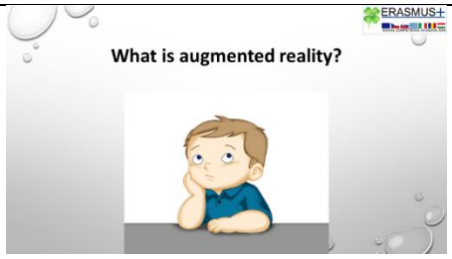
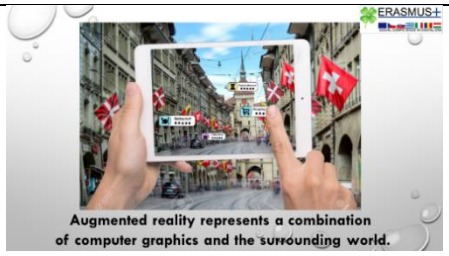
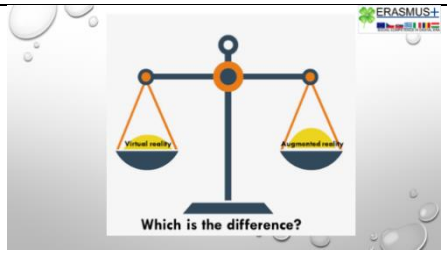
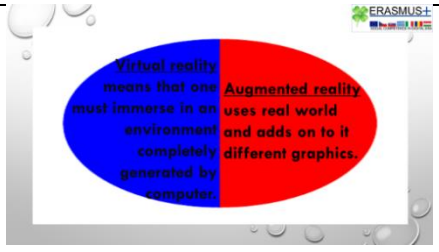


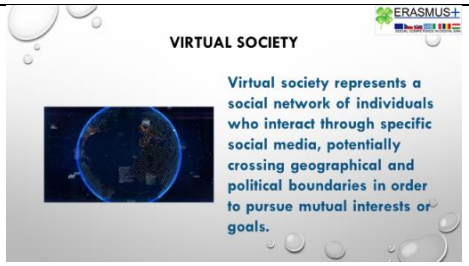
1. Virtual reality is an interactive computer-generated experience taking place within a simulated environment.
2. Morton Heilig invented his Sensorama in 1957.
3. Virtual society represents, as defined by Wikipedia, „a social network of individuals who interact through specific social media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals.
4. Telework gives the employees the chance of doing their tasks from home or from anywhere.
5. Virtual society is used in global economies, politics, culture or personal use.

ELECTRONIC VERSION

SLIDES	NOTES
	

ERASMUS+ Virtual reality (VR) is an interactive computer-generated experience taking place within a simulated environment .	
ERASMUS+ WHAT MAKES VIRTUAL REALITY POSSIBLE? Virtual reality is made possible by modern technology.	
ERASMUS+ Can I combine virtual reality with real world?	
ERASMUS+ YES! YOU CAN!	
 ERASMUS+ HOW ???	

ERASMUS+ BY MEANS OF AUGMENTED REALITY!	
 ERASMUS+ What is augmented reality?	
 ERASMUS+ Augmented reality represents a combination of computer graphics and the surrounding world.	
 ERASMUS+ Virtual reality Augmented reality Which is the difference?	
 ERASMUS+ Virtual reality means that one must immerse in an environment completely generated by computer. Augmented reality uses real world and adds on to it different graphics.	

ERASMUS+ What is a virtual society?	
 ERASMUS+ VIRTUAL SOCIETY Virtual society represents a social network of individuals who interact through specific social media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals.	
ERASMUS+ CAN VIRTUAL REALITY BE DANGEROUS? Yes! IT CAN BE DANGEROUS!	
ERASMUS+ WHAT ARE THE RISKS? The more time we spend online, the more chances are that this virtual society overtakes and seizes our attention and becomes an alternative to the life we have.	

ERASMUS+ REMEMBER! We should live realistically, not virtually!	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is virtual reality?

a) a cultural game
b) **an interactive computer-generated experience taking place within a simulated environment**
c) a software
d) a hardware component
e) a website

2. What makes virtual reality possible?

a) music
b) books
c) dreams
d) **technology**
e) work

3. Who was the first to speak about virtual reality?

a) Charles Dickens
b) Henry Ford
c) Justin Timberlake
d) Jane Austen
e) **Stanley Grauman Weinbaum**

4. Morton Heilig's machine was called:

a) **Sensorama**
b) panorama
c) webcam
d) cinema
e) Photoshop

5. What facilities did the Sensorama provide?

a) sound
b) image
c) wind
d) vibrations
e) **all of the above**

6. Augmented reality represents:

a) dreams
b) story telling
c) the reality you want
d) **a combination of computer graphics and the surrounding world**
e) a computer program

7. One successful example of augmented reality is:

a) Angry birds
b) **Pokemon**
c) Candy crush saga
d) Facebook
e) Electronic mail

8. A virtual society is represented by:

a) **a social network of individuals who interact through specific social media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals**
b) past events
c) dreams
d) a game
e) a computer software

9. For employees, telework means:

a) talking on the telephone
b) selling telephones
c) **doing their tasks from home or from anywhere**
d) advertising telephones
e) not working at all

10. Virtual society is used in:

a) global economies
b) politics
c) culture
d) personal use
e) **all of the above**

TRUE – OR – FALSE SENTENCES

1. Virtual reality relies on newspapers and magazines. **FALSE**
2. *Pygmalion's Spectacles* is a novel which speaks about virtual reality. **TRUE**
3. Virtual reality is an experience generated by our intentions. **FALSE**
4. Heilig's Sensorama was about the size of a jukebox. **TRUE**
5. Using augmented reality, people can scan the environment on which they can overlay information. **TRUE**
6. Augmented reality means that one must immerse in an environment completely generated by computer. **FALSE**
7. When doing telework, it is the face-to-face contact that matters. **TRUE**
8. The latest versions of virtual reality headsets cannot provide separate, different images for each eye, have stereo sound, motion sensors and even gaming controllers. **FALSE**
9. The negative aspects of virtual reality headsets are: the screen-door effect, eye strain, distortion, chromatic aberration. **TRUE**
10. Global economies used media to increase their market share. **TRUE**

OPEN – END SENTENCES

1. Who is considered the father of virtual reality? *(Heilig has often been considered the father of virtual reality.)*
2. What did augmented reality make possible? (*It made it possible to travel to other worlds.)*
3. What is the difference between virtual and augmented reality? *(Virtual reality means that one must immerse in an environment completely generated by computer. In opposition, augmented reality does not replace things. Instead, it takes the world we see and adds on to it different graphics.)*
4. How did the Pokemon game work? (*The game used the camera of the players to scan the surroundings and added computer generated creatures on the screen of the phone.)*
5. How do the governments support virtual society? *(Most of the governments try to support the use of telecommunications by making policies favourable for the IT infrastructure.)*

OPEN – END QUESTIONS

1. The internet abolishes borders and … *(reduces the costs of the transactions*).
2. Virtual society is beneficial on condition that … *(we use it wisely).*
3. The more time we spend online, the more chances are that virtual society overtakes and … *(seizes our attention and becomes an alternative to the life we have).*
4. In this new world, technology becomes the bridge between the aim we have and … *(the means we use to achieve it).*
5. In Pygmalion's Spectacles, Dan, the main character of the story, had put on a pair of goggles and was … (*instantly teleported into another dimension).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what „virtual reality” and „augmented reality” mean.
2. The theme of the module seems rather theoretical and technical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The virtual society is becoming, more and more, an alternative reality for pupils, who should fully understand the differences between the two concepts.
4. Understanding of the notion „virtual reality” is vital in general terms also: it makes pupils understand that they must be aware of using too much virtual reality and what consequences it has.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Most of the slides are meant for short discussions and brainstorming activities.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**VIRTUAL SOCIETY, ALTERNATIVE REALITY**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise : • what "virtual society" is; • what ''augmented reality'' is; • which fields of activity use virtual society; • the way in which too much use of virtual reality can be dangerous.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• virtual society • virtual reality • Augmented reality

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **Do you sometimes feel the need to escape from everyday life?**
- **Do you create an imaginary place where you like to retreat?**
- **How can we define ''virtual reality''?**

- **Can this virtual reality become an alternative to everyday life?**

Teacher makes sure that students understand what “mass media” is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 5 min.

Activity two: Presentation

Procedure: The teacher uses the **Power Point Presentation Chapter 5, Module C: *Virtual society, alternative reality***, which offers a presentation of virtual reality and a wide range of examples. Further, the teacher will encourage discussions and debates over the topic.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 20 min.

Activity three: How can we protect ourselves from not falling into the trap of virtual society?

Procedure: Students discuss the question; it can also be in the form of a brain storming. The teacher speaks about the defensive techniques and strategies that children can use online.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 5 min.

Activity four: Practical exercise

Teacher presents to the students a worksheet (See Annex 3) on which a futuristic image of a town will be displayed. Pupils will have to answer questions related to virtual reality. Also, students will make their own virtual reality, by imagining they have put on a pair of virtual reality headsets and are now teleported to a different unknown town of the future. They are asked to provide a detailed description of what they encounter, including: architecture, people, and atmosphere.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

Annex 3

Picture 26: City of the future

REMARKS

The proposed class plan goes for the classical, frontal teaching. If the teacher wishes to use non-classical, innovative teaching methods like pupils' lectures, group debates or brainstorming, the class plan has to be adjusted accordingly. If the teacher wishes so, it is also possible to extend the module into two classes.

USED AND RECOMMENDED SOURCES

- http://www.classvr.com/
- https://web.stanford.edu/dept/SUSE/projects/ireport/articles/3D/JCMST203293.pdf
- https://europepmc.org/abstract/med/9435714
- https://www.vrs.org.uk/virtual-reality-education/teaching.html
- https://www.teachthought.com/technology/10-reasons-use-virtual-reality-classroom/
- https://books.google.ro/books?id=bNwyDwAAQBAJ&printsec=frontcover&dq=virtual+reality&hl=ro&sa=X&ved=0ahUKEwi7uMWX9o3gAhUIPVAKHX1sCugQ6AEIKDAA#v=onepage&q=virtual%20reality&f=false
- https://books.google.ro/books?id=okgrDwAAQBAJ&printsec=frontcover&dq=virtual+reality&hl=ro&sa=X&ved=0ahUKEwi7uMWX9o3gAhUIPVAKHX1sCugQ6AEIPjAD#v=onepage&q=virtual%20reality&f=false
- https://en.wikipedia.org/wiki/Virtual_reality
- https://www.gutenberg.org/files/22893/22893-h/22893-h.htm
- https://pdfs.semanticscholar.org/1fb9/fcd25bc93043d1cac0e3396adcf058ae59be.pdf
- https://www.interaction-design.org/literature/article/augmented-reality-the-past-the-present-and-the-future
- https://www.google.ro/search?biw=1536&bih=706&tbm=isch&sa=1&ei=FxZOXKm1IqSOmgXeoqv4Aw&q=TRAVEL+FROM+ONE+PLACE+TO+ANOTHER&oq=TRAVEL+FROM+ONE+PLACE+TO+ANOTHER&gs_l=img.3..0i19j0i5i30i19l2.28962.31412..32135...0.0..0.107.538.5j1.....1....1..gws-wiz-img.....0i7i30j0i7i5i30.q0l2dzQM2Rw#imgrc=5F3yXC97MVMJKM:
- https://singularityhub.com/2018/11/01/how-virtual-reality-can-transform-who-you-are/
- https://en.wikipedia.org/wiki/Sensorama

VI. HEALTHY DIGITAL SOCIETY

A. SOCIETY CHARACTERISTICS

SOCIETY CHARACTERISTICS

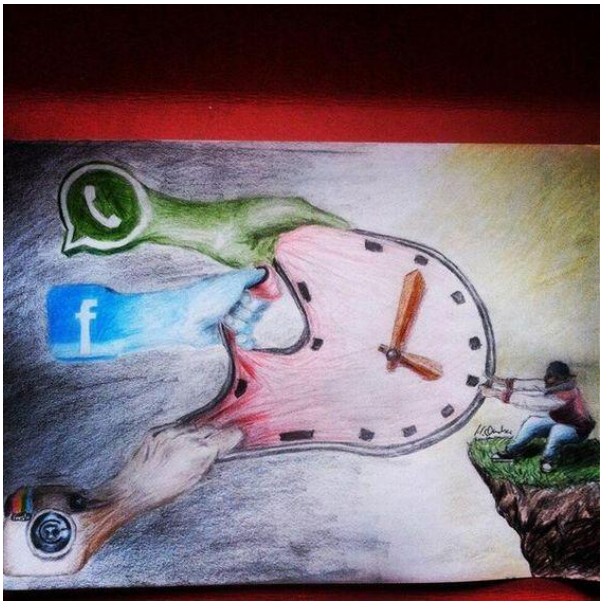
A man is a social creature. Most of us can't imagine life without family, friends, classmates or colleagues. That's why people have been associating in different societies since ancient times. But what the company really is? It is very difficult to write one universal, generally valid definition. For our needs, we need to know that society is a group of people who share the same values and are connected by common traditions, history, norms and cultural patterns. The society can then be understood by members of a particular state or nation, but it can also be taken much more widely, as in the case of the so-called Western civilization (the advanced part of the world, which is connected by many historical, political, economic and religious aspects).

The time we live in is completely different from the time our ancestors lived in, both in the positive sense and the negative. Most people in the developed part of the world have everything they need, therefore, they do not solve existential problems. But that does not mean that they would not solve any problems. Technology has become a daily part of our life over time. Thanks to digitization, the whole world has become globalized, everything has become faster and more accessible. But the things that were created to help people have their risks and dangers. They can be a good servant, but a bad master!

We must not forget that we are not just „walking stands" for mobile phones, but above all living entities belonging to a particular company and we can't avoid interaction with others. There is even a science branch - Digital Sociology - examining the impact of all digital techniques on our behaviour and how it affects the relationships between people and our self-concept. Therefore, it is certainly appropriate to address one of the basic questions of the present: "**How to maintain a healthy society in today's digital era?**"

Activity: Try to describe your feelings when you see these pictures.

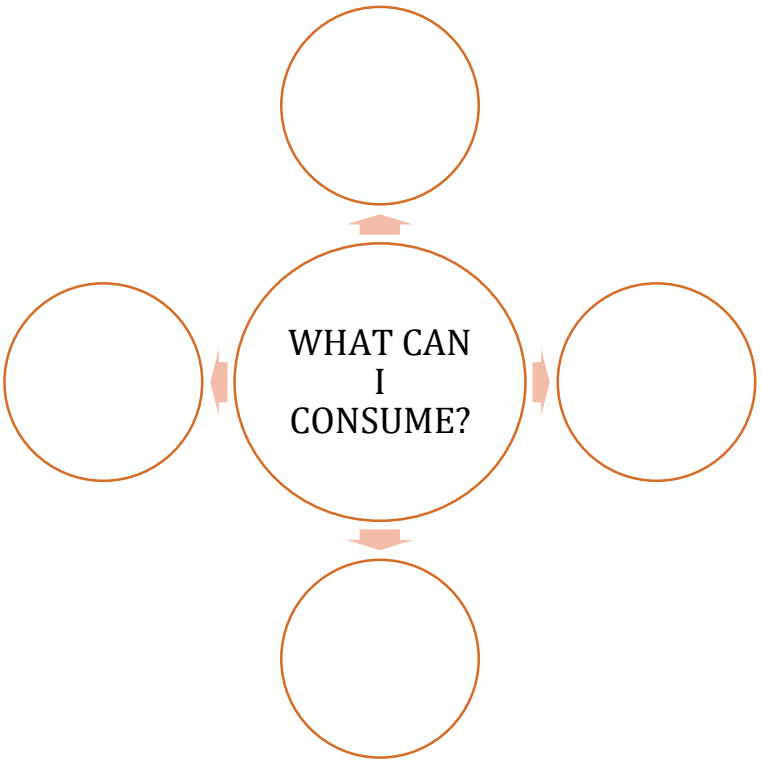
Picture 28: Negative impact of digital technologies 2



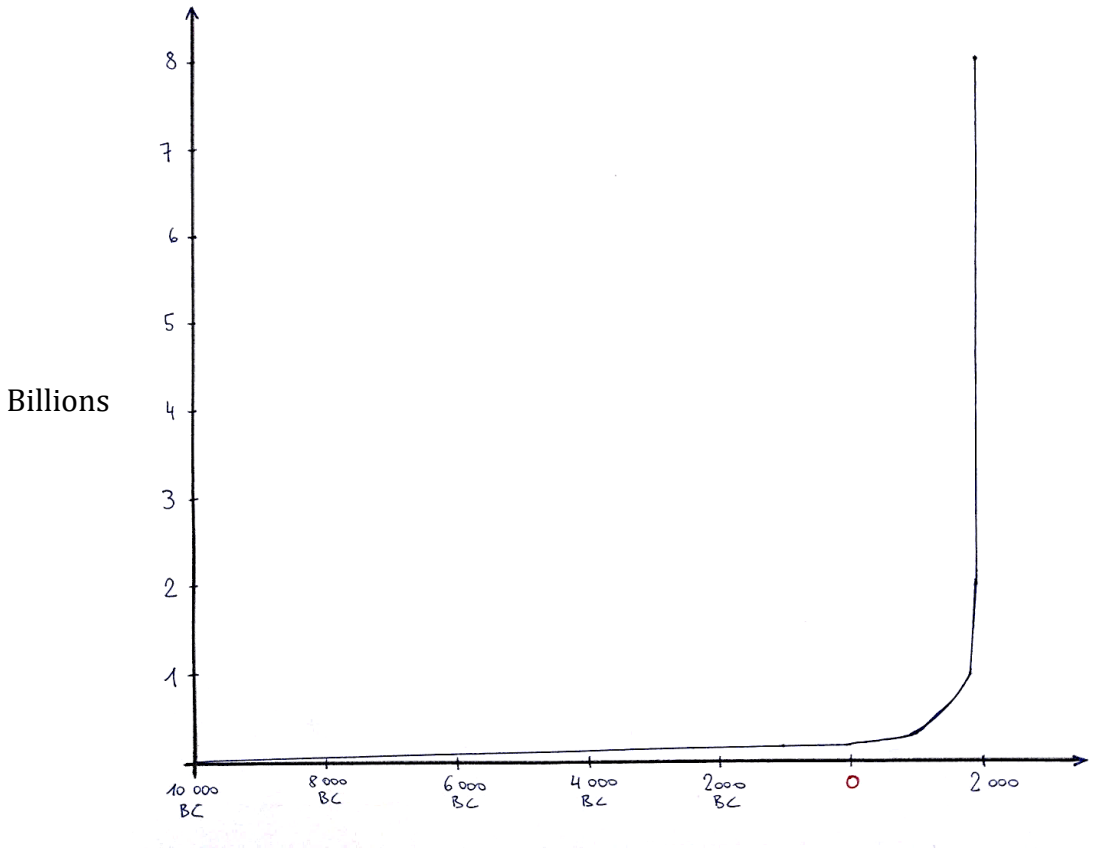
Picture 27: Negative impact of digital technologies

CONSUMERISM

Short reflection: Have you ever met the term "consumerism"? Do you feel it more positively or negatively? Do you know what the word is derived from?



To better understand the intensity of changes in society, let's look at the following graph:



Picture 29: Number of people in the world

The graph depicts the development of one important aspect of human presence on Earth. Can you guess which one? And do you think why we show this chart at all?

And not only is there more and more of us on Earth, the more important is that the so-called ecological footprint[9] each of us is much greater than it was only 100 years ago. One of the features of contemporary society is over-consumption. It has become a common thing to throw away things that can still be repaired, but we prefer to buy new ones because it is more convenient for us (cheaper, faster and easier). And the more we have, the less we are able to appreciate. Thus, the way of life is also reflected in interpersonal relationships and thus affects society as a whole.

[9] The rate at which a person pollutes the environment.

Picture 30: Black Friday

Today, our society is much in favour of high consumption. All you need to do is notice the ubiquitous advertising that has a single goal - to increase sales. Banks also benefit from the human desire to accumulate assets and so they lend more and more money. Illiterate people are sometimes unable to repay their debts and the situation often ends with confiscation of their property. This is also not the ideal feature of contemporary society.

Activity: Think of a slogan that could best attract attention to a product.

Consumerism (consumption) is connected with one term and this term is globalization. It means a global connection in which communication, business and travel are much easier. It has many advantages for man, but it also has negative aspects.

Technology has a big influence on the shape of a contemporary society. Computer technology or the Internet are not among the latest inventions, but with the arrival of

mobile phones, social networks, etc., these have caused major changes in how we approach each other.

The current generation has become so accustomed to communicating through applications that today many young people find it difficult to have a “normal” chat face to face. Social networks, whose main task was to facilitate people-to-people connections, paradoxically caused their greater isolation and alienation.

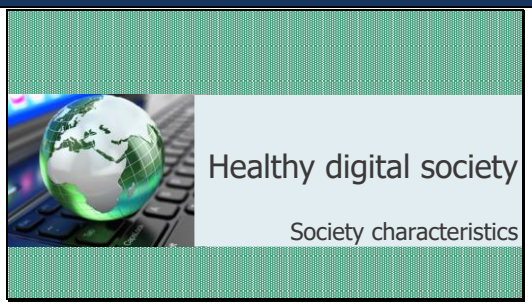
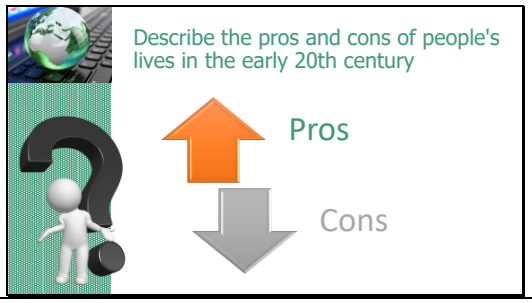
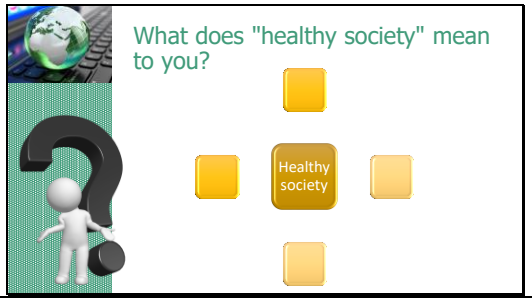
Picture 32: Negative impact of digital technologies 3

Picture 31: Negative impact of digital technologies 4

Although we may not realize this, consumerism can also have a big impact on interpersonal relationships. In the previous paragraphs, it has been mentioned that it is much easier for a person who lives in a consumerist society to replace a non-functional thing by a new one, rather than to fix the old one. The question is whether something similar doesn’t happen in interpersonal relationships as well. This might be seen, for example, in divorce statistics. While in the 1930s less than 6% of marriages divorced in the Czech Republic, in 2010 it was every other marriage.[10] A similar trend can be observed in different states of the developed world.

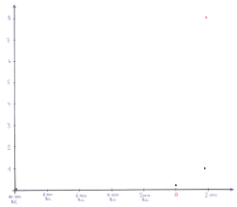
[10] https://zpravy.aktualne.cz/domaci/rozvodovost-v-poslednich-letech-klesa-manzelstvi-trva-dele/r~eeff8b680f2e11e8aca5ac1f6b220ee8/ Source ČTK [online source, cit. 20. 3. 2019]

ELECTRONIC VERSION

SLIDES	NOTES
	
	
	

What does such a picture say about today's society?

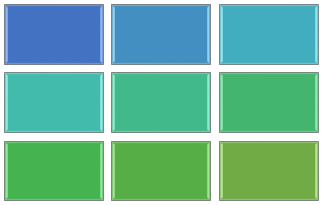
Create a population curve on the graph by joining the dots.

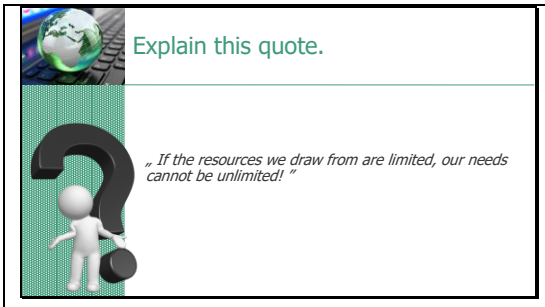


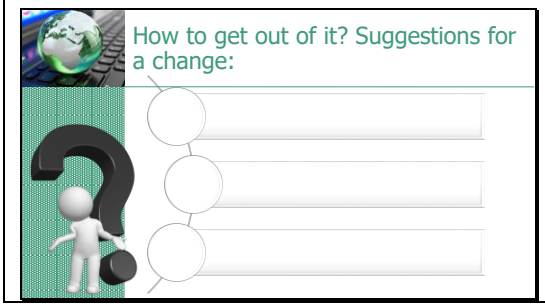
Finish the text.

Typical for consumer society is…

What can we „consume"? Not only in terms of eating.




Explain this quote.
„ If the resources we draw from are limited, our needs cannot be unlimited! ”


How to get out of it? Suggestions for a change:

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What isn't typical for Western society?

a) market economy
b) **planned economy**
c) democracy

2. The problem that has been solved through modern technology is:

a) criminality
b) **distance communication**
c) planet warming

3. What is not associated with globalism?

a) social networks
b) travelling
c) **folklore**

4. **How can we reduce the environmental footprint?**
    a) using cars
    b) **sorting waste**
    c) burning plastics

5. **Consumerism might cause our relationships to be:**
    a) stronger
    b) long lasting
    c) **less permanent**

6. **If someone wants to buy a new TV but doesn't have enough money and doesn’t want to get into financial troubles, the ideal solution is to:**
    a) save money
    b) take a loan
    c) **hire purchase**

7. **What are the biggest benefits of mobile phones for us?**
    a) fun and games
    b) social networks
    c) **possibility to stay in touch with loved ones**

8. **The positive contribution of globalization is:**
    a) alienation
    b) pollution
    c) **travelling**

9. **Typical leisure places in the developed world include:**
    a) churches
    b) schools
    c) **shopping malls**

10. **As a result of the expansion of modern technologies, more emphasis is placed on teaching:**
    a) work education
    b) military training
    c) **media education**

TRUE – OR – FALSE SENTENCES

1. The number of people on Earth has grown more than 7 times over the past 200 years. **TRUE**
2. New technologies help people to communicate with each other. **TRUE**
3. Divorce was a common issue in the Czech Republic between 1918 and 1938. **FALSE**
4. Digital Sociology - examines the impact of all digital techniques on our behaviour. **TRUE**
5. South America's loss of forests is a thing that has no effect on Europeans. **FALSE**

OPEN – END QUESTIONS

1. How would you define society? (*Society is a group of people who share the same values and are connected by common traditions, history, norms and cultural patterns.)*
2. What pitfalls can lurk on the Internet? (*Thanks to digitization, the whole world has become globalized, everything has become faster and more accessible. But the things that were created to help people have their risks and dangers. They can be a good servant, but a bad master! For example cyber bullying.*)
3. How can consumerism be translated into interpersonal relationships? (*The way of life is also reflected in interpersonal relationships and thus affects society as a whole. It has been mentioned that it is much easier for a person who lives in a consumerist society to replace a non-functional thing by a new one, rather than to*

fix the old one. The question is whether something similar doesn't happen in interpersonal relationships as well.)

4. What do you rank among the biggest problems of contemporary society? (*The current generation has become so accustomed to communicating through applications that today many young people find it difficult to have a "normal" chat face to face. Social networks, whose main task was to facilitate people-to-people connections, paradoxically caused their greater isolation and alienation.*)
5. How to maintain a healthy society in today's digital era?

YES/ NO QUESTIONS

1. In your opinion, is it possible for planet Earth to feed a growing population? **YES**
2. Is an annual purchase of the latest iPhone model a sign of consumerism? **YES**
3. While the number of people on Earth is still growing, this does not affect the environment through reducing their claims. **NO**
4. The world's greatest environmental problems include the vast amount of plastic in the oceans. **YES**
5. As a result of human interference with nature, a large number of plant and animal species die out. **YES**

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what society characteristics are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion of diversity is vital in general terms also: it makes pupils understand that they must be active and accept others.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
3. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
4. If embarking on ICT – aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences etc.). They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we would suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework.
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just samples; good answers may be formulated in other words as well.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**SOCIETY CHARACTERISTICS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to : • characterize the concept of society; • realize how digital technology influences our society ; • to mention the advantages and disadvantages of life in the early 20th century; • to characterize the concept of a healthy society; • clarify the concept of consumerism; • propose several measures to change society for the better.
Materials needed:	Textbook, PowerPoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• healthy society • consumerism • globalization • modern technology
PART II: Description of the lesson	
Activity one: Warm up **Procedure**: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks the question below and gets their opinions:	

- **What is society?**
- **Which states can be classified as countries of Western civilization**

Teacher makes sure that students understand the term society

Interaction: T-Ss, Ss –T

Time to be allocated: 8 min.

Activity two: Describe the pros and cons of people's lives in the early 20th century?

Procedure: Pupils will mention the advantages and disadvantages of people's lives in the early 20th century and compare them to life in the 21st century.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 10 min.

Activity three: Mind Map: What does "healthy society" mean to you?

Procedure: Pupils try to find signs of a healthy society.

Interaction: T-Ss, Ss-Ss, Ss - T

Time to be allocated: 5 min.

Activity four: Picture description

Procedure: Pupils write what evokes the picture in them.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 5 min.

Activity five: Unfinished sentence: Typical for consumer society is…

Procedure: Pupils characterize what it means when they say society is consumer and give examples of what we can consume except food.

Interaction: T-Ss, Ss-Ss; Ss - T

Time to be allocated: 10 min.

Activity six: Clarify this quote: „*If the resources we draw from are limited, our needs cannot be unlimited!*”

Pupils try to clarify the quote mentioned above...

Interaction: T-Ss, Ss - T

Time to be allocated: 4 min.

Remarks to the homework: Ideas for a change. Pupils try to suggest a guide to changing society for the better.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects used innovative methodologies like brain storming and group debates, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- KOHÁK, Gerizim. *Zelená svatozář: kapitoly z ekologické etiky*. 2., přeprac. vyd. Praha: Sociologické nakladatelství, 2000. Studijní texty (Sociologické nakladatelství). ISBN 80-85850-86-9.
- *Změna trendu: Rozvodovost v posledních letech klesá, manželství trvá déle* [online]. 11. 2. 2018 [cit. 2019-03-22]. Dostupné z: https://zpravy.aktualne.cz/domaci/rozvodovost-v-poslednich-letech-klesa-manzelstvi-trva-dele/r~eeff8b680f2e11e8aca5ac1f6b220ee8/

Picture sources:

- https://www.pinterest.com/

B. MORAL AND ETHICS

MORAL AND ETHICS

For the proper functioning of a society, we need to define what is allowed and what is not allowed. Just as we respect the traffic rules to prevent possible accidents, we also have to follow the rules, which organize the behaviour of people in society. These rules can be legitimized or based on a custom.

Morality is the basis of right and wrong behaviour. We often have to decide what is right or wrong, and morals are the internal regulators of decision making. It is an inner voice that tells us to do it or not.

The ethics is a system of moral principles and it aims to answer the question:" How should I live?" Ethics investigates what is the best way for a human's life, and what kinds of actions are right or wrong. Some people think: “What is legal, isn’t always allowed!” But this isn't true. Every society also operates on the basis of unwritten rules of what is normal and proper. For example, it is very rude to spit in public in China but in other countries it is rude to snivel.

Punctuality is very important in Germany, Switzerland and Scandinavia, where even a five-minute delay is not tolerated. A five-minute delay is tolerated in Austria, and “so called” academic quarter-hour in France. The Italians, the Spaniards and the Portuguese do not worry about punctuality at all. For these nations it is not a problem to show up at the meeting with a half-hour delay without any remorse.

Picture 33: Moral and ethics

We live at a time when the Internet, mobile phones, computers and tablets have become an integral part of our lives. We cannot imagine our life without them anymore. In the virtual world, we often feel that everything is allowed, because no one sees us. We are more courageous in our statements. We are not afraid of saying things that we would not tell the others face to face. Unfortunately, we don´t think about whether we offend another person.

People who text and use social media often are more attracted to hedonism than morality. We often think about ourselves rather than others. We think that we have the right to comment on everyone and everything. Very soon, it may happen that we will become a focus of other people's attention, who can judge us.

Communication technologies are, among other things, a tool for building virtual relationships, in groups of people who would not normally meet in everyday life. Not every user, however, is trusted because anonymity of the internet users makes it very difficult to guess who we communicate with. When we share information about ourselves on social networks, it may be that we exploit this information and become a victim of cyberbullying.
According to a definition in the Cambridge Dictionary, cyberbullying is the activity of using the internet to harm or frighten another person.[11]

[11] https://dictionary.cambridge.org/dictionary/english/cyberbullying

Differences between traditional bullying and cyberbullying.[12] Cyberbullying takes place in the virtual world, so cyberbullying is different from classical bullying.

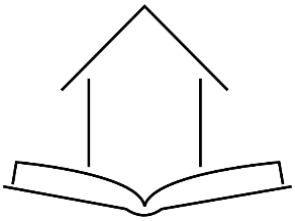
1. We can encounter cyberbullying anywhere and anytime we are connected to the Internet or mobile network (GSM). This means that from a physical point of view we have no place to hide from a cyber-attack.
2. The offender is anonymous in most cases, hidden behind the nickname. It can be anyone because the anonymity of the virtual environment erases the differences between people (age, gender, social status, etc.)
3. For cyberbullying, the number of onlookers may be significantly higher than cyberbullying. In addition, so-called cyberbullying spreaders can be added to cyberbullying, sending information about cyberbullying (e.g. by linking to sites where cyberbullying has appeared)
4. Anyone can become a victim, regardless of age, social status or success and popularity in society.
5. The consequences can be more destructive, as discriminatory materials remain stored in the virtual world and can rebound cyberbullying.
6. Finding victims of cyberbullying is very difficult as these people often close themselves off and they don't often communicate about their problems with other people.

How to defend against cyber-attacks.

1. Stop communicating with the attacker and do not take revenge.
2. Block the attacker, prevent him from accessing the victim (e.g. contacting a service provider, blocking attacker messages)
3. Unveil the offender
4. Announce an attack to adults and hide all the evidence for the police.
5. Notice if there is cyberbullying in the neighbourhood.
6. Support victims and advise them what to do.

[12] KOPECKÝ, K., KREJČÍ, V. *Rizika virtuální komunikace – příručka pro učitele a rodiče*. Olomouc: NET UNIVERSITY, 2017. ISBN 978 – 80 – 254-7866-0.

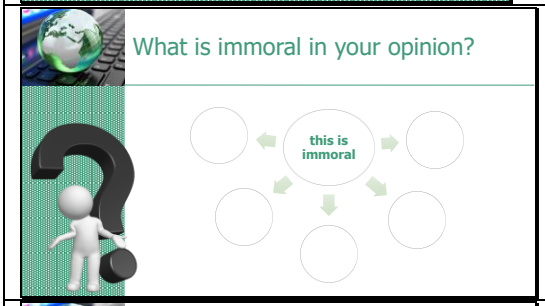
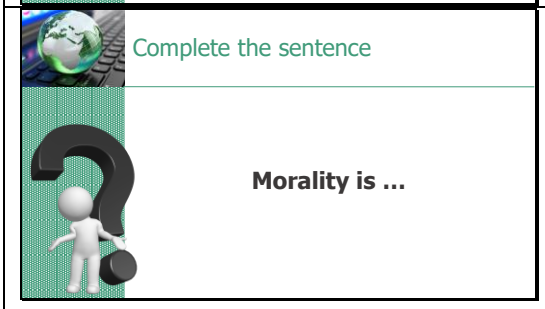
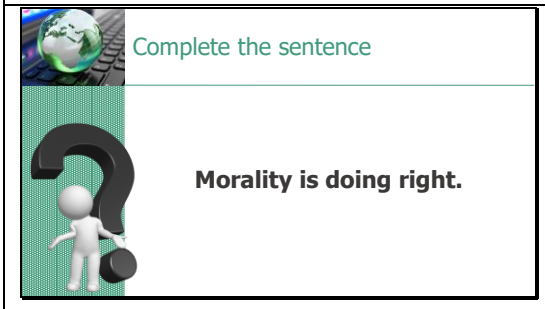
HOMEWORK SOLUTIONS

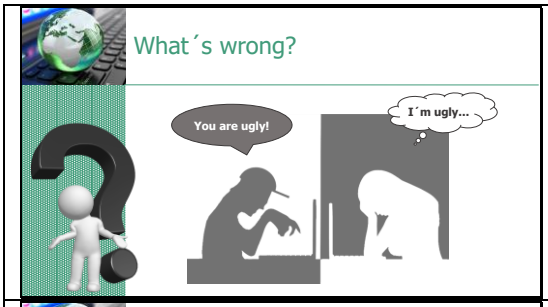


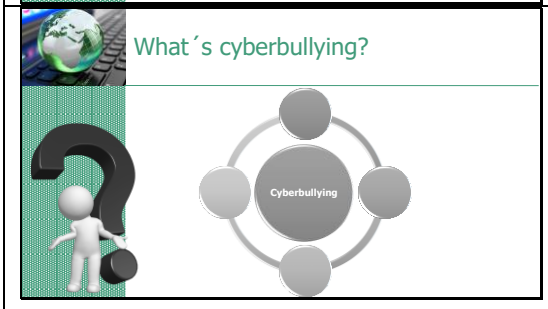
How to protect yourself from cyberbullying?

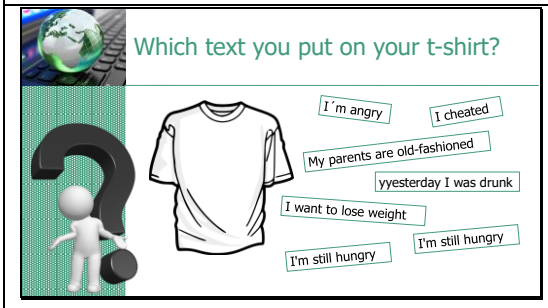
1. respect other users, behave with respect, do not cause conflicts
2. not to trust overly to everybody
3. not to disclose sensitive information
4. learn about Internet service rules

ELECTRONIC VERSION

SLIDES	NOTES
	
	
	


What´s wrong?
You are ugly!
I´m ugly...


What´s cyberbullying?
Cyberbullying


Which text you put on your t-shirt?
I´m angry
I cheated
My parents are old-fashioned
yyesterday I was drunk
I want to lose weight
I'm still hungry
I'm still hungry

How to protect yourself from cyberbullying?
1.
2.
3.

Healthy digital society
Moral and ethics

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. **Morality is**:
    a) **the idea of right behaviour in society**
    b) the law of right behaviour in society
    c) predisposition to right behaviour in society

2. **If you violate moral principles, the punishment is**
    a) **shame**
    b) a fine
    c) imprisonment

3. **What does „illegal" mean**:
    a) under the law
    b) according to customs
    c) **not allowed by the law**

4. **Information that can be found in the internet:**
    a) are always true
    b) only those which end with the acronym .com are true
    c) **only some of them are true**

5. **Bullying is:**
    a) physical restriction of a person
    b) psychological restriction of a person
    c) **physical and psychological restriction of a person**

6. **Cyberbullying means:**
    a) **dangerous communication realized in the virtual world**
    b) socially tolerated way of solving problems among people
    c) vulgar verbal communication among people

7. **On social networks sensitive information and photos of ourselves we:**
    a) **do not publish**
    b) publish only for our friends
    c) publish

8. **In case we are bothered through social network we:**
    a) try to return it
    b) do not tell anyone, because of shame
    c) **immediately end the discussion, save the evidence and inform the adult**

9. **The victim of bullying can be**
    a) just a shy person
    b) a person with a visible handicap
    c) **anyone**

10. A cyber attacker can be:

a) only an aggressive person
b) only aggressive and arrogant person
c) **anyone**

YES/ NO QUESTIONS

1. Do all the cultures hold the same moral principles? **NO**
2. Is morality an innate disposition? **NO**
3. Can we define bullying as physical abuse of an individual? **NO**
4. Is there any difference between bullying and cyberbullying? **YES**
5. Can we defend ourselves from cyberbullying? **YES**

TRUE – OR – FALSE SENTENCES

1. All the cultures hold the same moral principles. **FALSE**
2. Morality is an innate disposition. **FALSE**
3. We consider morality as a regulator of a human behaviour. **TRUE**
4. There is no bullying on social networks. **FALSE**
5. We can protect against cyberbullying by not communicating sensitive information about ourselves. **TRUE**

OPEN – END QUESTIONS

1. What is Morality? *(Morality is the basis of right and wrong behaviour. We often have to decide what is right or wrong, and morals are the internal regulators of decision making. It is an inner voice that tells us to do it or not.)*
2. Clarify the term illegal. (*Illegal means that the fact is not allowed by law.*)
3. What dangers are waiting for us in the virtual world? (*We are more courageous in our statements. We are not afraid of saying things that we would not tell the others face to face. Unfortunately we don´t think about whether we offend another person.*)
4. Clarify the term cyberbullying. (*Cyberbullying is the activity of using the internet to harm or frighten another person.*)
5. How can we protect ourselves against cyberbullying? (*Respect other users, behave with respect, and do not cause conflicts; not to trust overly to everybody; not to disclose sensitive information; learn about Internet service rules.*)

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what moral and ethics in the digital era are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion of diversity is vital in general terms also: it makes pupils understand that they must be active and accept others.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides are meant as visual support for the lesson.
3. Slides follow the written version but do not fully overlap with it; and therefore, a combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just samples; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**MORAL AND ETHICS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise: • what moral is and what moral isn´t; • what is not illegal, it isn´t allowed; • each country, culture has its moral principles, codes that we should respect • how dangerous it is to communicate personal information about yourself on social networks; • that not everyone with whom we communicate on a social network is the one they are claiming to be; • how to protect ourselves from cyberbullying.
Materials needed:	Textbook, PowerPoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• moral • ethics • safety on social networks • cyberbullying
PART II: Description of the lesson	
Activity one: Warm up **Procedure**: To prepare the students for topics, teacher asks the question below and gets their opinions:	

- **What is moral?**
- **What is immoral in your opinion?**

We collect ideas together on the board in the mind map.

Interaction: T-Ss, Ss –T

Time to be allocated: 5 min.

Activity two: Unfinished sentence method

Procedure: Students complete this sentence: Morality is… Students propose a definition of morality.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 5 min.

Activity three: What does this sentence mean? What is legal, isn't always allowed!

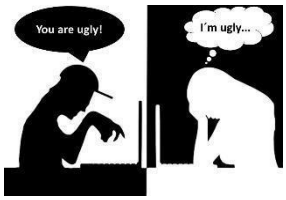
Procedure: Students discuss this sentence. Pupils should realize that every country, culture, has unwritten rules in addition to laws that must be followed.

Interaction: T-Ss, Ss-Ss, SS – T

Time to be allocated: 10 min.

Activity four: What's wrong?

Procedure:



The teacher shows pupils the picture and the pupils formulate the possible dangers of it. Based on this method, they realize that the principles of decent behaviour should be observed even in the virtual world. Subsequently, there is a discussion of what

cyberbullying is, how it differs from classical bullying, and how to defend ourselves against cyber-attacks.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity five: Create your t-shirt?

Procedure:

Each student chooses an inscription he/she wants to wear on his/her T-shirt. Subsequently, there is a discussion of what information the students publish on their social networks profiles and the dangers they face. The teacher can introduce pupils to some authentic cyberbullying stories, such as Megan Meier.

Interaction: T-Ss, SS – T

Time to be allocated: 10 min.

Activity six: Summary of the module, discussion of a possible homework (How to protect yourself from cyberbullying? Create your own tutorial.)

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T – Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects innovative methodologies used like brainstorming and group debates, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

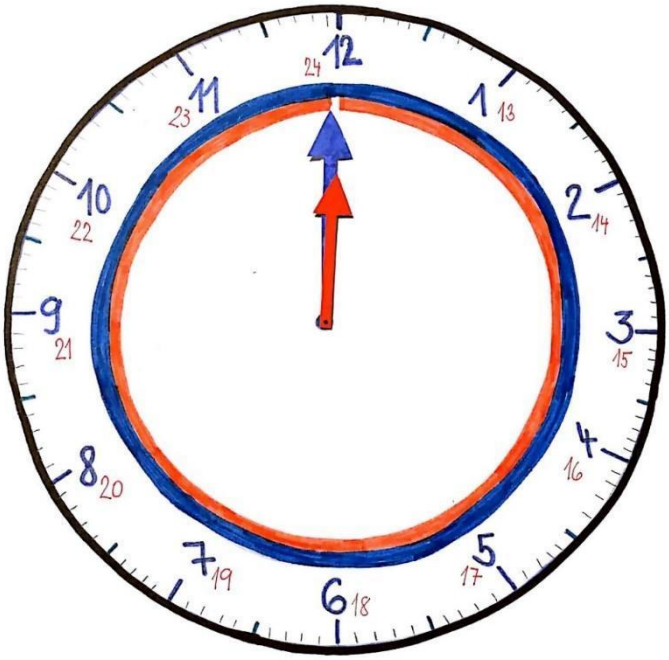
USED AND RECOMMENDED SOURCES

- https://dictionary.cambridge.org/dictionary/english/cyberbullying
- KOPECKÝ, K., KREJČÍ, V. Rizika virtuální komunikace – příručka pro učitele a rodiče. Olomouc: NET UNIVERSITY, 2017. ISBN 978 – 80 – 254-7866-0.

C. DEVELOPMENT OF THE DIGITAL SOCIETY

We live in the 21st century. But do we realize how unusual this era is?

Let's get closer to this by showing some numbers. In the geography textbooks we can read that our planet is approximately 4, 6 billion years old and life on our planet arose one billion years later. From the history lessons we should know that a human (more specifically Homo sapiens) has inhabited our planet for around 300 thousand years (and maybe less). Isn't this a big disparity?



Picture 34: If we convert a time in which life exists on Earth to one day (24 hours) a human would show up in the last minute of the day?

In addition, it must be taken into account that the biggest changes in the relationship between the blue planet and humans started in the Neolithic age - approximately 10, 000 years ago. From the perspective of our planet one human life is a minute, yet man has managed to cause unprecedented changes on Earth and, in essence, to subdue it.

Before we start with the very characteristics of contemporary society, let's recall a few fundamental milestones in the development of the human community, which have fundamentally influenced the way our ancestors lived and, therefore, us.

1. Neolithic Revolution (approx. 10,000 BC) - hunters and gatherers became farmers and animal keepers. Humans slowly began to subdue the earth, but still kept due respect for it, for they were completely dependent on nature.

2. The Industrial Revolution (turn of the 18th and 19th centuries) - Man started to use machines to ease heavy work. Unfortunately, progress also had a downside (for example, major interventions in nature).

   Activity: Find the inventions of the Industrial Revolution in these anagrams:

   SAMTE EINENG ARILAIWY

   TARPHELGE MOLO

   Solution: STEAM ENGINE, TELEGRAPH, RAILWAY, LOOM

3. The Digital Revolution (from the mid-20th century) - The changes that began with the Industrial Revolution were compounded by the invention of computing. Development has accelerated in an absolutely unprecedented way.

   Activity: Write at least 4 technology devices you use regularly.

However, the above-mentioned revolution has not only brought about changes in technology. It can be said that they have affected all areas of human life from the economy to religion. They were also the cause of a huge population increase (see Module A).

The latest computer technology inventions (but also others) make life much easier for us in many ways. However, we should be very cautious using these inventions. There are new threats that society must respond to. Among the most recently mentioned topics are also so-called "fake news". What is it? And how can one defend against them?

FAKE NEWS

Activity: Write one sentence of what you think when you say "fake news". You have 3 minutes to complete the task, then check with your teacher to see if your definition was correct.

Among other things, disinformation is one of the problems we should recently and intensely deal with. It is the **deliberate propagation of untrue information** designed to influence the public's opinion and to mislead various institutions or the media and thus to make us doubt whether it is even possible to reveal the truth. In addition, information is very easy to distribute, so we can encounter disinformation very often. The fact that the European Union has intensively discussed this topic shows how important this issue is.

Because of the amount of information that comes to us from day to day it is becoming more and more difficult to remain objective and not to be influenced. It is not easy to recognize which information is based on fact and which is not, but it can be learned.

Activity: Compare these two following articles reporting the same event. Which one is more plausible from your point of view? Justify your decision.

SHOCKING NEWS! A WOMAN FOUND ALMOST DEAD. IS IT STILL SAVE IN OUR STREETS??

A woman identified as Jana (30) was found unconscious yesterday in the afternoon near her house by a passer-by. She is now in the hospital and her condition is stabilized. At the place of the incident, according to eyewitnesses, a group of younger darker skin people has often been seen recently. One of the locals (his name is known to the editor's, but will not publish it) said to the incident: "It's a terrible thing going on here. Man should be afraid to go out on the street. Where do we live!? "

Although the police investigation is not over yet, it is very likely that the crime was done by someone from the aforementioned immigrant group from North Africa.

A WOMAN AMBUSHED IN PRAGUE

Perhaps a robbery took place yesterday in Prague's Vinohrady district. The victim was a thirty-year-old woman who was found around six-thirty in the afternoon at a busy place on the edge of a local park.
Prague March 18, 2018 05:41 pm

According to the police, the woman was ambushed by an unknown man (or men) about half an hour before an ambulance was called to her by a passerby. The woman was attacked by a blunt object from behind the head and then unconscious for a short time. After she woke up in the hospital, she found that she was missing her jewelry and her handbag with a wallet, from which the investigators conclude that it was a robbery. However, the perpetrator and motive are still under investigation.

The police are asking all the citizens who were walking around Seifertova and Nerudova Streets at the time and saw something suspicious to report this immediately to line 158.

Source: ČTK

Picture 36: Illustration

Picture 35: Power of media

Quote: "*It doesn't matter how many resources you have if you don't know how to use them."*

Basically, you need to verify some basic facts for each piece of information. We should be interested mainly in:

a) Who is the author of the information - for serious information websites or newspapers, the author's name is always in the article. It should also be possible to trace the owner of the media. There are also lists of so-called disinformation websites, which we should avoid, if we want a serious piece of information.
b) What is communicated to us - usually we do not know the intention of the author of the article, but with a little practice we can recognize whether the information which is presented to us is relevant or not. A distinction must be made between the classic message, which should inform in a neutral way, and the personal opinion of a particular author (e.g. commentary or glossary). Advertising, which is specific to someone paying for it, also has a big impact on contemporary society. It may be a promotion of products or perhaps a promotion of political opinion. Somewhat strange are the so-called conspiracy theories,[13] some of which may

[13] Theories that explain various events like a secret conspiracy of governments or powerful groups that could affect all of humanity. Although they often seem fantastic, many readers will fully or at least partially believe them.

seem completely absurd to us (the theory of flatness of the Earth), but others may be more credible and many believe them.

Picture 37: A conspiracy theories

c) How the information is given - a warning sign showing the author's try to attract the reader's attention instead of trying to inform can be large and colorful headlines, often containing the words "shock", "incredible", "revelation", etc., which are mostly associated with tabloid diaries. However, these are not reliable sources of information. You also need to be careful if the articles are written with the intention of harming someone. We usually know that they are written in a tendency (with negative interest) and use labeling and typecasting.[14]

In addition to text, articles include images (and videos on the Internet). There is also a risk of so called "deep fakes", as there are many programs to edit them and it is often very difficult to distinguish the original from the photo montage (video edits are not yet widespread but some people see a potential future threat) . For most images, you can verify their authenticity with Google. Just right-click the image area and then select "Search for image using Google".

[14] Including one or more people in a particular group in a negative way.

For example, you can find out if an image that is attached to an article is not a mere photomontage of a similar image that has already appeared on the Internet.

Activity:

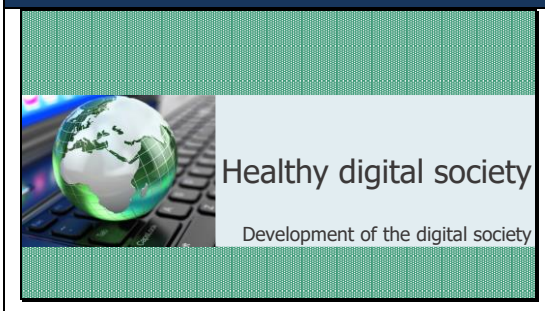
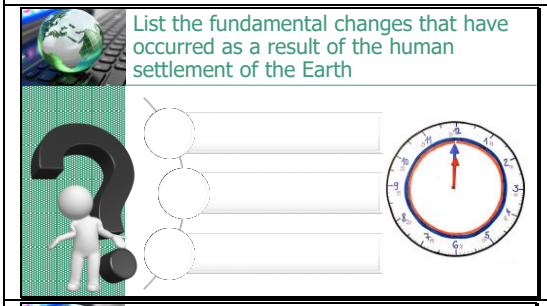
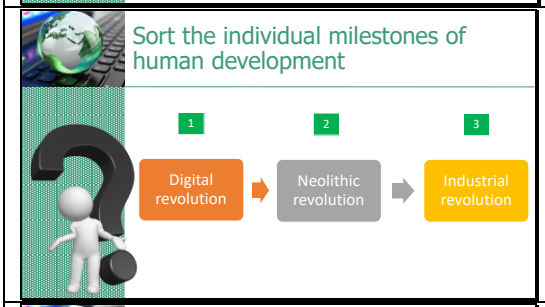
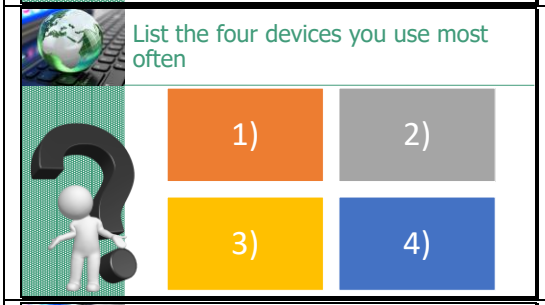
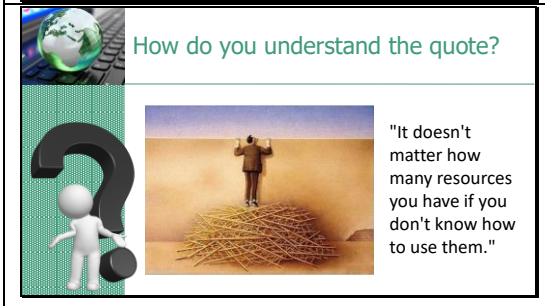
Many people don't read whole articles today, but only headlines, but they can be misleading. Make pairs and think of a title to the attached photo. One of the two makes up a headline that says the men are criminals, and the second makes up a headline saying that they are participants of an authorized demonstration that was severely repressed by the police.

Picture 38: Kenya´s activists

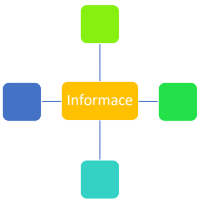
Homework: Try to compare one serious and one tabloid source in a pair. Browse the website and write down what's typical for the site.

[media name]	[media name]

ELECTRONIC VERSION

SLIDES	NOTES
	
	
	
	
	

What needs to be verified for each piece of information?



What do you think should contain credible information?

Discard topics that do not belong to media education

- journalists and reality
- consumerism and globalization
- causes and consequences of the migration crisis
- how the tabloids work
- photos in the media
- how to defend yourself from misinformation
- Influence of advertising on man
- the 21st Century Social Crisis

Make up the headline for the newspaper article

Make up two headlines, one of which will appear to be the men lying in the picture are criminals, and the other is the participants of a legal demonstration repressed by the police.

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. **During the Neolithic Revolution, people became:**
    a) hunters
    b) gatherers
    c) **farmers**

2. **What is not a new digital era invention?**
    a) internet
    b) telephone
    c) **television**

3. **New inventions bring us:**
    a) only negatives
    b) only positives
    c) **positives and negatives**

4. **What occurs most often in fake news?**
    a) sport results
    b) **politics-related information**
    c) weather forecast

5. **Which of the topics offered will most likely be fake news:**
    a) **conspiracy theory**
    b) unemployment analysis
    c) car accidents

6. **Mobile phones have not yet replaced:**
    a) navigation
    b) **pacemakers**
    c) cameras

7. **Which information regarding the articles need not to be verified?**
    a) source
    b) media credibility
    c) **author's age**

8. **What is not typical for advertisement:**
    a) **it is a short-term phenomenon**
    b) is targeted to a particular group of people
    c) someone paid for it

9. **People who spread untruths and provocations on the Internet are called:**
    a) **trolls**
    b) elves
    c) magicians

10. **A subject that focuses on, among other things, modern technology and information work is called:**
    a) financial literacy
    b) **media education**
    c) environmental education

YES/ NO QUESTIONS

1. The main invention of the digital revolution was computing. **YES**
2. The issue of Internet security is also often discussed in media education. **YES**
3. Journalists should be as biased as possible when pursuing their profession. **NO**
4. The big headline is a sign of serious journals. **NO**
5. Can fake news be distributed without intent? **YES**

TRUE – OR – FALSE SENTENCES

1. There are more mobile phones than people in the world. **TRUE**
2. Between 1997 and 2018, the number of Internet users increased at least 18 times. **TRUE**
3. Deep Fakes are exclusively text materials. **FALSE**
4. In 2018, an average of 187, 000 mails were sent worldwide in one minute. **FALSE** (Actually it‘s 187 million emails)
5. Before you complete this exercise, people across the YouTube site will play over 4.3 million videos. **TRUE** (True - if you fill it in at least 60 seconds).

OPEN – END QUESTIONS

1. Undoubtedly, the Industrial Revolution has pushed forward. However, it also had negative consequences. Can you think of any? (*Major interventions in nature*)
2. What do you think is the biggest danger of the Internet? (*Deliberate propagation of untrue information*)
3. Why do people tend to believe conspiracy theories? (*Because the author's try to attract the reader's attention with large and colourful headlines, often containing the words "shock", "incredible", "revelation".*)
4. Think of one particular example of how to use a deep fake video. (*Take a video that happened somewhere else and rewrite the story and place of occurrence*)
5. How can you verify the accuracy of information? (*Always verify the source*)

METHODOLOGY REMARKS

1. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
2. Understanding of the notion of diversity is vital in general terms also: it makes pupils understand that they must be active and accept others.
3. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of an electronic version of the module.
4. Teachers are encouraged to use non-standard, innovative methods in teaching the present module.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
3. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
4. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too.

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE LESSON PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**DEVELOPMENT OF THE DIGITAL SOCIETY**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to: • to characterize the 21st century; • to recognize significant milestones in the development of the human community; • clarify the concept of fake news; • to realize the potential risks that fake news bring; • to realize which aspects of media messages should be verified.
Materials needed:	Textbook, PowerPoint presentation, smart-board, projector, paper and envelopes.
Preparation & Prerequisites:	Teacher will have previously read the TSM and the textbook, together with the electronic version (PPT).
Subjects involved	• development of society • important milestones in the development of human society • technology development and their possible impact on society • fake news

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics: Try to remember history lessons and find inventions from the Industrial Revolution in these anagrams: SAMTE EINENG, ARILAIWY, TARPHELGE, MOLO. Write at least 4 technology devices you use regularly.

Interaction: T-Ss, Ss –T

Time to be allocated: 8 min.

Activity two: List the fundamental changes that have occurred as a result of the human settlement of the Earth

Procedure: Pupils think and indicate the most fundamental changes that have occurred as a result of the human settlement.

Interaction: T-Ss, Ss –T

Time to be allocated: 5 min.

Activity three: Brainstorming on fake news concept

Procedure: Pupils write in one sentence what they think when they say "fake news".

Interaction: T-Ss, Ss-Ss, Ss - T

Time to be allocated: 5 min.

Activity four: Comparing the credibility of the given articles

Procedure: Pupils try to compare the given articles to inform about the same event. They state which one is more plausible to them. They justify their decision.

Interaction: T-Ss, Ss –T

Time to be allocated: 12 min.

Activity five: Quote - what did the author want to say?

Procedure: Pupils explain in their own words the following quote: "It doesn't matter how many resources you have if you don't know how to use them."

Interaction: T-Ss, Ss-Ss, Ss - T

Time to be allocated: 3 min.

Activity six: What needs to be verified for each piece of information?

Procedure: Pupils try to state what we should verify in the present media messages to see if this is a credible message.

Interaction: T-Ss, Ss-Ss, Ss - T

Time to be allocated: 7 min.

Activity seven: Newspaper headline

Procedure: Pupils try to come up with a serious and unserious headline for the given photo.

Interaction: T-Ss, Ss-Ss, Ss - T

Time to be allocated: 4. min

Remarks to the homework: Compare one serious and one tabloid source of information. Browse the website and write down what's typical for the site.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects used innovative methodologies like brainstorming and group debates, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- https://thebulletin.org/doomsday-clock/
- https://ct24.ceskatelevize.cz/svet/2535133-do-konce-stoleti-se-pocet-lidi-na-zemi-zdvojnasobi-vesti-studie-osn-az-165-miliardy
- KOHÁK, Erazim. *Zelená svatozář: kapitoly z ekologické etiky*. 2. přeprac. vyd. Praha: Sociologické nakladatelství, 2000. Studijní texty (Sociologické nakladatelství). ISBN 80-85850-86-9.

Picture sources:

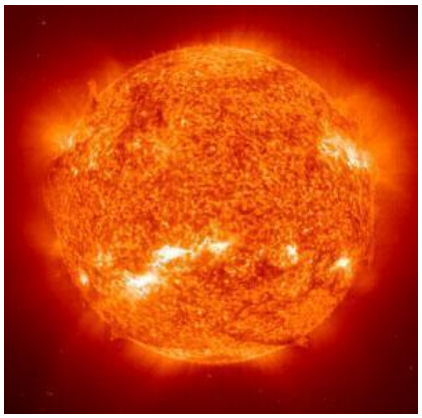
- https://cs.wikipedia.org/wiki/Sv%C4%9Btov%C3%A1_populace#/media/File:World_population_growth_(lin-log_scale).png
- www.pinterest.com

VII. SOCIAL RESPONSIBILITY FOR THE FUTURE

A. SUSTAINABLE DEVELOPMENT OF A SOCIETY

SUSTAINABILITY

In principle, sustainability is a simple thing: if the given status of a system can be maintained forever, the system is sustainable. That is the common-sense understanding of the notion. (Here, “forever” is understood in an intelligent way; *perpetuum mobile* does not exist. For example, the Sun loses its energy and material constantly and so far for its existence, it has used up 50% of its energy. (The Sun uses up 600 million tons of hydrogen and turns it into helium every second.) That is, it is simply calculable that during some time, the Sun will lose its whole energy (hydrogen) and will “close down”; today’s life on Earth will not be sustainable. It will happen in 5 billion years. For that reason and bearing in mind the practical measure of “eternity on Earth”, our Sun is eternal.)



Picture 39: The Sun

Apart from the Sun, the Earth may “end up” in several other ways too, so sustainability in one respect may be unsustainability in another. In principle, we should always say “in the sense of the system being sustainable.” (“In the sense of Sun creating opportunity of life on Earth, the life on Earth is sustainable.”) That means that “sustainability” is a simple notion only if we see the given system in a very simple way. In fact, any “normal”, existing system is much more complex and thus, sustainability is also a very complex notion.

The complexity of the notion is a result of two issues:

1. The complexity of the system; i.e. the great variety and interrelation of its components;
2. The dynamic character of the components; i.e., the change of the interrelated components in time. It is a natural condition, since sustainability is understood as that of a changing system. Static (i.e. not-changing) systems are always sustainable in themselves.

By definition, **Sustainability** is the process of maintaining change in a balanced environment, in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. For many in the field, sustainability is defined through the following interconnected domains or pillars: environment, economic and social. Sub-domains of sustainable development have been considered also: cultural, technological and political.[15]

The definition shows that components of a system may be of very different type: objective (natural), societal, political, etc. etc. That means sustainability may also be considered from several points of view; and the same system may be sustainable from one respect but not sustainable from another.

Here, we deal with the sustainability of the society; i.e., the "system" is the **society.** Society is an extremely complex system in itself and, therefore, sustainability of a society may be considered from a great variety of angles. (Components)

DEVELOPMENT

We do not consider static systems in the project; components and their interrelations change in time. (In fact, a "static system" is rather an artificial, theoretical notion.) Since components of the system change in time, the system itself and its characteristics change. **That change is called development.**

[15] https://en.wikipedia.org/wiki/Sustainability

Again, the common-sense definition of the definition is different and simpler. We can assign to the characteristics of the system a qualitative attributive: “the system is better than before, if…” or “the system is worse than before, if…” Common sense says “a system is developing” if the characteristics of the system become better.

Naturally, the definition of “better” of “worse” can be absolutely subjective too. Since it is so, the term “development” may also become subjective. As an example, if we rate democracy is much better than dictatorship, a democratisation process is definitely a “good development” for us. It is not so good for the dictators, however – and vice versa. So, when we speak about the “development of the society”, we must bear in mind that it contains a considerable amount of subjective evaluation. Further, as we define a reference characteristic of the society from among the great many of other ones, we may define social development, technical development, energy development, health development, business development, career development and so on and so forth.

According to a definition in the Cambridge Dictionary, development is **the process in which someone or something grows or changes and becomes more advanced.**[16] Here in this definition, the expression of “more advanced” substitutes the word “better” we used above. “More advanced” also contains a very considerable portion of subjective judgement.

RESOURCES

Any process of development (and indeed, any process of movement) needs (and uses up) energy. There are many forms of energy: physical energy, electrical energy, nuclear energy, potential energy, mental energy, psychical energy, solar energy and so on and so forth. The adjective shows the resource of energy, if it is nuclear, mental, solar or whatever. **That is, resources are that provide energy for changes.**

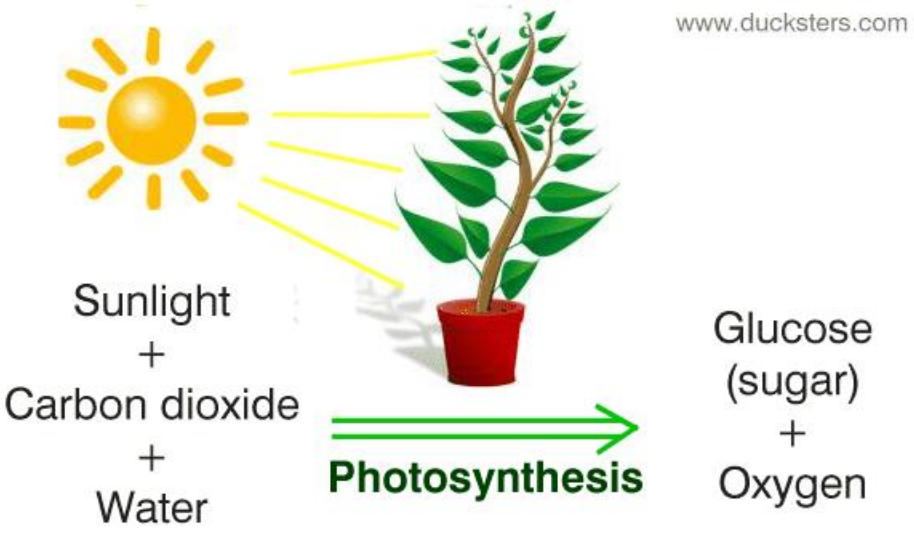
There is a great variety of resources: e.g., oil for heat energy and for kinetic energy, radioactive materials for nuclear energy, the Sun for solar energy and so on. Since different motions (changes) may need different kinds of energy, changes may demand

[16] https://dictionary.cambridge.org/dictionary/english/development

different kinds of resources. That is, one resource is not necessarily a resource for another change. Our mental energy is a very important resource, but it is not a specific resource, say, for heating.

Since our Earth is limited in space, it cannot contain unlimited amounts of resources. Sooner or later resources end on Earth. Apart from using up resources, changes produce residuals which are, in principle, not useful: we call such materials waste. Mankind uses up resources of the Earth (global resources) while also loading the Globe by the waste it produces.

In a very complex system like our Earth, the resource system is also very complex. It is also possible that waste from one process is a resource for another process. When we use up fossil energy (i.e., burn coal), we produce CO2 as a waste. For plants (with the help of photosynthesis) CO2 is a resource and they produce oxygen as a waste; and people use up oxygen as a resource and produce CO2 as waste.



Picture 40: Photosynthesis

I.e., if we calculate and combine suitable amount of items (people, cars, etc.) that produce CO2 with a calculated amount of plants (rain forests) that use up CO2 and produce oxygen, we may secure a balance – i.e., in that respect and sense, we can create a sustainable situation. It was so for hundreds of thousands of years on Earth, but due to sharp increase of energy use and therefore, sharp increase of CO2 production combined

with the negative effect of deforestation, the original balance is destroyed and now the Earth suffers a lot from the excess amount of carbon dioxide produced. (See the next modules below)

Picture 41: Deforestation

Further, some systems (notably, the Earth) is capable to regenerate some amount of used up resources. As an example: while we sleep, our organism regenerates our mental energy – at least, some amount of it. Further, new resources may be discovered that were not known or not used earlier. (Nuclear energy was not known two hundred years ago and solar energy has been really in use for some 10…20 years only). Now, that resulting amount of available resources minus used up ones plus regenerated resources plus discovered new resources must show a positive balance, otherwise the total amount of resources will decrease and sooner or later resources will be used up totally – i.e., that process cannot go forever; that process is not sustainable. As it will be shown in the modules below, **mankind does not live sustainable life on Earth today**.

Totally similar logic can be used to determine the resource balance and thus sustainability for the societal life, i.e., for the society. Development of the society also demands definite resources – mostly material resources but not only: social situations in the society may grow into unrest (we may say the “endurance resource of the people” has been used up). Now, using this or that method, we may calm down the people (say, by giving more money for them) – i.e., we may say the political system of the society has regenerated some amount of social endurance.

When systems use up their resources, they stop functioning and all kinds of problems occur. Similarly, when a community uses up its resources, it stops functioning normally. In the latter case, problems usually appear in the form of unrest, civil wars, and revolutions. The society – like a living organism or system – cannot live any longer as earlier. So, development of the society also may be sustainable and also unsustainable. And since everything on Earth is limited, society resources are also such – i.e., we may say society development is also not sustainable; and history teaches us how may radical changes had to be made to continue – in another form, in another style, with another social (and societal, political) characteristics.

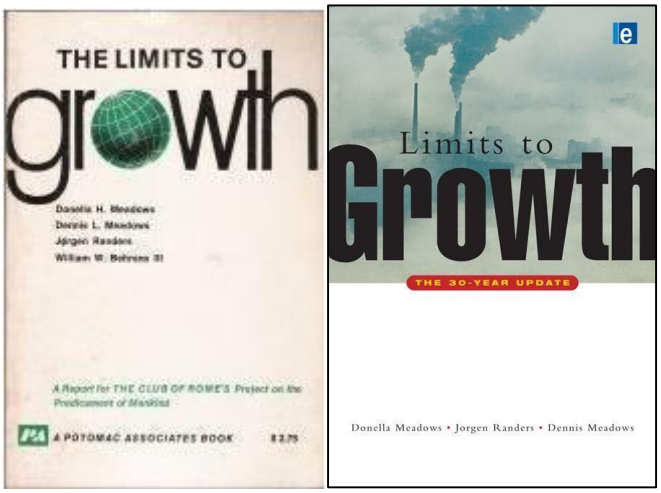
GLOBAL SUSTAINABILITY

When we define a system, we do it by separating it from the rest of the environment. That is, a system is always a part of a bigger system. The family is part of the local society, the latter is part of the nation, and the nation is part of the region or continent; which is part of the Globe. The Globe is part of the Solar system and so on and so forth. Sustainability is always understood as a concrete process within a concrete, limited system. If the given process (change, development) in the given system is sustainable, everything is fine – but what, if not…?! **Unsustainability in a system may be still sustainable in a bigger system.** If income in a family is constantly lower than inevitable expenses, the situation is not sustainable for the family. But if the family gets regular material help from the local government, their life may become sustainable. If the local government does not have enough resources but the state helps regularly, the life of the family becomes sustainable again. In other words, a not sustainable system may survive at the expense of the resources from outside. A country may not have enough oil (or does not have at all) – still, cars may run on the roads of the country if it buys oil from outside.

Here, the buying process from outside may be considered yet another process of the given community which in itself may be sustainable or unsustainable. If a country does not have enough money (i.e., resources) to buy oil from outside, the process is again not sustainable. If so, yet another process must be found to generate money. If it is successful, the combined process is sustainable.

In principle and in theory this “not sustainable – go for a bigger system to secure sustainability” process may be unlimited only, if our Universe is unlimited. We do get energy from outside of our Globe – through sunshine. But basically, our day-in – day-out life is limited to the Globe; we live on Earth. That is, in real cases and today, we really cannot go beyond the Earth to secure sustainability. And since resources on Earth are limited, changes (present processes, development) cannot go forever. That “global-mindedness” is the result of the last 50 years or so; and the very first landmark that really shocked the world was the publication of the famous “The limits to growth”, published in 1972 by the members of the famous “Club of Rome”. [17]

Authors of the “The limits to growth” used a method that now looks very simple: they took the known amount of a given resource and also the past tendencies of its use and calculated, till when the given resource lasts. To their big (and grave) surprise, the general picture showed that in 30…50 years, resources will be depleted. And what was even more frightening and sinister: if they supposed that the amount of the given resource does not equal the known amount but is an order of magnitude higher, the “breakdown time” shifted by some 20-30 years only…



Picture 42: The famous “The limits to growth” and its 30-year update

[17] https://en.wikipedia.org/wiki/The_Limits_to_Growth

“Globalism”, “global-mindedness” started from that famous landmark. Ever since, a lot of new calculations were made and new scenarios were implemented, but all show that mankind today does not live a sustainable life, our “footstep” is bigger than the Globe can manage sustainably. (About that fact, see modules below)

Mankind seeks solutions to that sinister future ever since. A lot of steps have been done and a lot of results have been achieved, but those steps and results can only slow down the depletion process (and it is extremely important to have more time to find and implement the solution) but still, as it is, mankind still does not live a sustainable life on the Globe. And to find a solution is our inevitable obligation vis-à-vis our children and grandchildren.

DIGITAL ERA AND SUSTAINABILITY

Sustainability is determined by two facts: amount of resources and the speed of their use. So, if we want to secure sustainability, we either have to increase the amount of resources available or slow down their use. (The best is of course the combination of them both.)

Digital Era and amount of resources

Most of the resources used up in most of the processes are a kind of energy. **That is, if anything allows us to use less energy it is to a benefit for us.**

If we look at the complex characteristics of the development on Earth, it is clear that growth of well-being is very closely connected to the increase of energy use. The more developed a country is, the more energy it uses. That is, it would be selfish to limit the energy use increase in poorer countries; they also have the right to grow equally developed as the leaders. Therefore, **it is not the amount of energy used that is important but the effectiveness of the energy use.**

Digital technology is of great help in both aspects. Digital solutions use up very low amounts of energy (down to microwatts) and, at the same time, mostly through the possibility of sophisticated energy management (digital automation, digital control, digital

waste management, etc.) That is – using the benefits of digital technology, the amount of energy used can be reduced substantially.

Further, due to the steep reduction of energy use, new energy resources can be also implemented. An interesting and rather “futuristic” example: nanotechnology (a further step forward after micro-technology) has made it possible to use the kinetic energy of blood (!!) secure energy needed to operate the most sophisticated heart devices like pacemakers. (Energy is generated in microwatts; and the method is similar to the old water mills.)

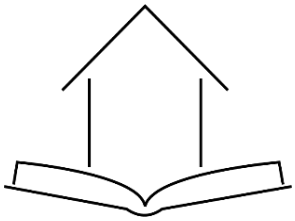
Digital Era and reduction of use of resources

As it was touched upon already, electronic (digital) control can substantially reduce the energy used per the given task. That is, a given task may be performed for much less energy – the energy effectivity becomes much higher. (It also implies that the waste of energy – which occurs almost always – can be also substantially reduced) Through increase of energy efficiency, we may meet both targets: we (and also the poorer countries) can meet what we wish regarding society development but with relatively much lower use of energy.

In society, the Digital Era can also help secure sustainability; new ways of communication and information flow may increase the endurance of the citizens. True, that phenomenon can also be misused through manipulation.

All in all, even if the global efficiency of energy use is much higher than before and even if we introduce new sources on energy (NRES = new and renewable energy sources, like solar, wind, geothermal) we use more energy than before – i.e., the sustainability situation has become better, but we still do not live a sustainable life on Earth.

HOMEWORK SOLUTIONS



1. A sustainable process is: Our parents earn money and it is enough for our family to buy food, clothes, movie tickets and other necessary things. When we buy a car, we take a credit but before, we calculate how we can pay it back.

2. Gasoline is a fuel (resource) for cars but it is not a resource for us people as a meal. Our family income is a resource for us but not a resource for the family next door. If they are in need and ask for help, we share our income and then, it becomes a common temporary resource for both families.

3. The income of my parents is enough to cover our expenses. SUSTAINABILITY OF THE FAMILY LEVEL

   The income of my parents is not enough to cover the family expenses, but the social help of the local government secures our balance. SUSTAINABILITY ON THE LOCAL COMMUNITY LEVEL

   The income of my parents and the social support is not enough for us to cover our family expenses, but with the state child's support, we can cover everything. SUSTAINABILITY ON NATIONAL LEVEL

ELECTRONIC VERSION

SLIDES	NOTES
VII. TOPIC **SOCIAL RESPONSIBILITY FOR THE FUTURE** 1. MODULE **SUSTAINABLE DEVELOPMENT OF A SOCIETY**	
WHAT IS „SUSTAINABILITY"?	
WHAT IS „SOCIETY"?	

WHAT IS „SOCIETY"?

SOCIETY IS A GROUP OF PERSONS (OR OTHER, USUALLY LIVING CREATURES) OF ANY SIZE THAT ARE CHARACTERISED WITH SOME COMMON FEATURES

WHAT IS „SOCIETY"?

WHAT IS „SOCIETY"?

SOCIETY IS A GROUP OF PERSONS (OR OTHER, USUALLY LIVING CREATURES) OF ANY SIZE THAT ARE CHARACTERISED WITH SOME COMMON FEATURES

WHAT IS IT, A „SYSTEM"..?

SYSTEM

IS A GENERAL TERM FOR GROUP OF PERSONS AND/OR THINGS OF ANY SIZE THAT IS CHARACTERISED WITH SOME COMMON FEATURES AND THAT IS SEPARATED FROM ITS AMBIENCE.
(IN GENERAL, A SOCIETY MAY ALSO BE CONSIDERED AS A SYSTEM)

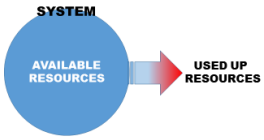
SYSTEM

WHAT IS IT, „RESOURCHES"..?

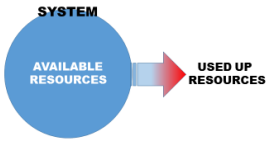
RESOURCES

ARE ALL AVAILABLE HUMAN AND MATERIAL CHARACTERISTICS AND THINGS NECESSARY TO ACHIEVE THE DEVELOPMENT TARGET. IN THE PROCESS OF THE ACHIEVEMENT, SOME OR ALL NECESSARY RESOURCES WILL BE USED UP. WITHOUT THE NECESSARY AND SUITABLE RESOURCHES, TARGETS CANNOT BE ACHIEVED.

SYSTEM

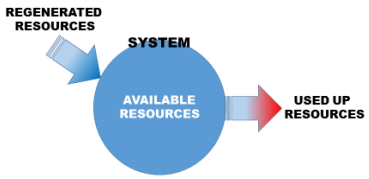


ALL CHANGES USE UP SOME RESOURCES OF THE SYSTEM

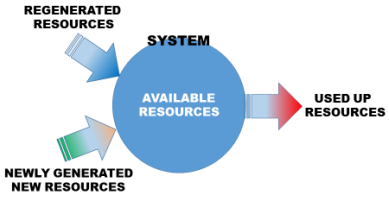


ALL CHANGES USE UP SOME RESOURCES OF THE SYSTEM

IF RESOURCHES OF THE SYSTEM ARE NOT REGENERATED, THE SYSTEM WILL BE SOONER OR LATER DEPLETED – **THE PROCESS IS NOT SUSTAINABE**



THE SYSTEM ITSELF MAY REGENERATE RESOURCES. IF THE REGENERATED RESOURCES FULLY COVER THE USED UP RESOURCES, THE PROCESS IS **SUSTAINABLE**.
IF THE REGENERATED RESOURCES DO NOT COVER,
THE PROCESS IS **NOT SUSTAINABLE**.



SOME NEWLY GENERATED RESOURCES MAY ALSO BE ADDED TO THE SYSTEM.

CRITERIA OF SUSTAINABILITY:

REGENERATED PLUS NEWLY GENERATED RESOURCES ARE MORE THAN USED UP RESOURCES.

SUSTAINABILITY IN A SOCIETY:

ACTIVITIES IN THE PRESENT SOCIETY DO NOT MAKE SIMILAR ACTIVITIES IN THE SOCIETY IMPOSSIBLE IN THE FUTURE

DIFFERENT POSSIBLE TYPES OF SUSTAINABILITY

PERSONAL SUSTAINABILITY
FAMILY SUSTAINABILITY
LOCAL SUSTAINABILITY
NATIONAL SUSTAINABILITY
REGIONAL SUSTAINABILITY
GLOBAL SUSTAINABILITY

A NOT SUSTAINABLE SYSTEM MAY BECOME SUSTAINABLE IN A WIDER SYSTEM ONLY

A NOT SUSTAINABLE SYSTEM MAY BECOME SUSTAINABLE IN A WIDER SYSTEM ONLY

(WE USE MORE OIL THAN WE HAVE – WE IMPORT OIL; I.E. A NON-SUSTAINABLE COUNTRY MAY BECOME SUSTAINABLE IN EUROPE)

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is sustainability?

a) when I sustain something in my hands
b) **when the system remains in equilibrium or always returns to it**
c) when the system does not remain in equilibrium
d) when the system is capable to perform something
e) when the system is not capable to perform anything

2. What is a system?

a) **when several parts are connected by some common characteristics**
b) when one part has some common characteristics
c) when parts do not have common characteristics
d) when something does not have parts
e) when something has just one part

3. **What is a society?**
    a) when I help my friend
    b) when my friend helps me
    c) **society is a complex system consisting of similar parts, mostly people**
    d) when a system does not consist of people
    e) when people consist of system

4. **What is development?**
    a) **when judged by some characteristics, the system becomes more valuable**
    b) when the system gets worse
    c) when the system does not change
    d) when judged by some characteristics, the system does not change
    e) when the system wins the soccer match with another system

5. **What is a resource?**
    a) resources do not exist
    b) resources what a system cannot have
    c) resources are colours of the system outside
    d) **resources are a sort of energy that enables the system to perform some actions**
    e) resources are that cannot allow any actions

6. **What happens to the resources when we use (the system uses) them?**
    a) nothing happens
    b) the amount of resources increases
    c) **the amount of resources decreases**
    d) we cannot use the resources
    e) the amount of resources remains the same

7. **What happens when the given resource is used up?**
    a) the system goes on without the resource
    b) the system dies
    c) the system has to be born newly
    d) the system stops generating resources
    e) **the system gets unable to perform the given function**

8. **Can a system regenerate the used up resource?**
    a) **yes, in principle, it can**
    b) no, it cannot
    c) yes, it can, but a small amount only
    d) yes, it can, but more than used up only
    e) no, it can generate another resource only

9. **What happens when more resources are used up than the newly generated (regenerated) ones?**
    a) **sooner or later all resources will be used up; the system stops functioning**
    b) nothing happens; everything goes on
    c) the system increases using up the given resource
    d) the system develops further
    e) the system develops but slower

10. **How can a not sustainable system become sustainable?**
    a) it cannot
    b) **only with the help of the outside world (a bigger system)**
    c) a system is always sustainable
    d) a system cannot be unsustainable
    e) all the world is sustainable
    f) it declares non-sustainability

TRUE – OR – FALSE SENTENCES

1. A system is always very complex. **FALSE**
2. Sustainability is when a system can develop. **FALSE**
3. Sustainability when the system may go on functioning like now forever. **TRUE**
4. Resource is in fact the ability to perform some action. **TRUE**
5. Development is when a system becomes more valuable by some characteristics. **TRUE**
6. Resource is the result of its use. **FALSE**
7. A system cannot regenerate used up resources. **FALSE**
8. When the system cannot regenerate used up resources, it will stop functioning sooner or later. **TRUE**
9. Sustainability can only be maintained from outside only. **FALSE**
10. A non-sustainable system may become sustainable with the help of a bigger system only. **TRUE**

OPEN – END QUESTIONS

1. What is a system? *(It consists of parts having some similar characteristics)*
2. What are resources? *(Ability, energy to perform some function)*
3. What is development? *(When a system becomes more valuable from a viewpoint of a given characteristic.)*
4. What is sustainability? *(When the system may go on functioning forever.)*
5. How can a non-sustainable system become sustainable? *(Only with the help of the outside world, i.e., a bigger system.)*

OPEN – END SENTENCES

1. Resources are … *(in fact energy sources to perform a given action).*
2. Sustainability is … *(when the given system may go on functioning like now forever).*
3. A society is sustainable, if … *(our children and grandchildren will not be limited in similar actions).*
4. A society develops if … *(it becomes more valuable by some characteristics).*
5. Non-sustainability can only be changed in sustainability … *(with the help of the outside world – i.e., a bigger system).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what sustainability is.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The concept of sustainability is of general importance in life: pupils should fully understand that whatever they do, it uses up energy and it may not go forever.
4. Understanding of the notion „sustainability" is vital in general terms also: it makes pupils understand that they must be active and energetic for fighting sustainability.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5 - 10 minutes each. The following themes are proposed for the pupil's minilecture:
   - What is a system? Its characteristics and features. Possible processes in a system.
   - What is sustainability? How to make a non-sustainable process turn into sustainable?
   - What is a society? Some characteristic processes in a society. Smaller or bigger societies.
   - Digital Era and sustainability. How can digital technology improve sustainability?
   - Debates or brainstorming over some concepts

The following themes are proposed for debates or brainstorming:

- What does sustainability mean?
- Do we live a sustainable life?
- What should we do to improve the sustainability situation?

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides No 2. 4., 6. are meant for short discussions and the summary of the discussion and the right short answers to those slides are on the next slides: No. 3., 5., and 7. respectively.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
    a. https://www.youtube.com/watch?v=_5r4loXPyx8 (Sustainability; 4')
    b. https://www.youtube.com/watch?v=rmQby7adocM (Sustainability, 9"43")
    c. https://www.youtube.com/watch?v=7V8oFI4GYMY (Sustainable development, 3'40")

d. https://www.youtube.com/watch?v=9-xdy1Jr2eg (Sustainable development goals 5’52”)
e. https://www.youtube.com/watch?v=KW73Rs2zz6o (Community development; 5’46”)

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding using smartphones in the classroom is simply counterproductive; if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just samples; good answers may be formulated in other words too.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**SUSTAINABLE DEVELOPMENT OF A SOCIETY**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise : • what systems and societies in general are; • what sustainability in general terms means; • how the sustainability of a society can be achieved; • what levels of system's sustainability we can consider; • how non-sustainability of a system can be re-established.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• systems • energetics • sociology • politics

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is sustainability?**
- **What is energy use?**
- **What is energy conservation?**

Teacher makes sure that students understand what sustainability is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity two: What do you think: what is sustainability and unsustainability?

Procedure: It can be a game. Students write their own samples for sustainable processes in their surroundings and the teacher evaluates their guesses. The English language is the language of the internet, so the teacher can speak about the importance of English learning.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 8 min.

Activity three: Do we live a sustainable life on Earth? If so, why? If not, why?

Procedure: Students discuss why we live a life as they think. It may be organised as a group debate between “yes-ers” and “no-ers”. Teacher speaks about the reasons for the non-sustainability of life we live.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity four: Discussion about social (societal) sustainability

Procedure: Teacher introduces the question and students speak about it. Discussion points will be: the signs and symptoms of a sustainable vs non-sustainable society. How the Digital Era influences sustainability in general and in society.

Interaction: T-Ss, Ss - Ss

Time to be allocated: 12 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

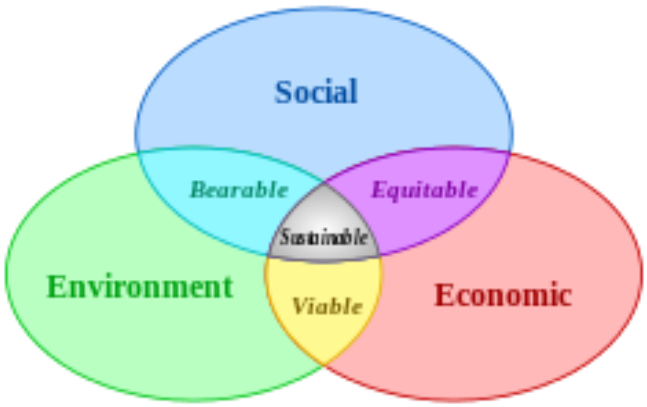
The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brainstorming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Sustainability
- https://dictionary.cambridge.org/dictionary/english/development
- https://en.wikipedia.org/wiki/System
- https://en.wikipedia.org/wiki/Development
- https://en.wikipedia.org/wiki/Resource
- https://en.wikipedia.org/wiki/Energy
- https://en.wikipedia.org/wiki/Conservation_of_energy
- http://www.altenergy.org/renewables/renewables.html
- https://en.wikipedia.org/wiki/Information_Age
- https://en.wikipedia.org/wiki/Digital_Revolution
- https://en.wikipedia.org/wiki/Photosynthesis
- https://en.wikipedia.org/wiki/Deforestation
- https://en.wikipedia.org/wiki/The_Limits_to_Growth)
- https://en.wikipedia.org/wiki/Club_of_Rome
- https://en.wikipedia.org/wiki/Social_sustainability
- https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm
- https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

B. PROTECTION OF THE ENVIRONMENT IN THE DIGITAL ERA

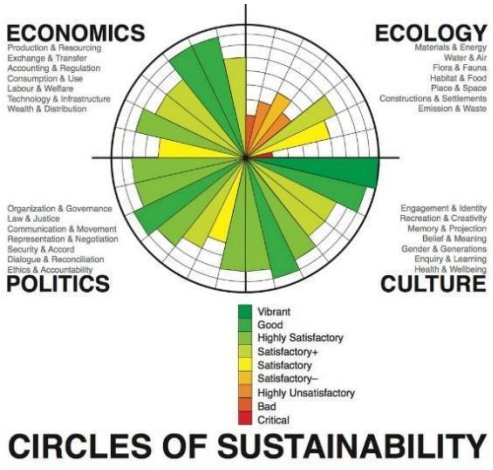
By a simple definition, **"environment is everything which surrounds us."** In that sense, **"environment"** is a totally general term and we can define this or that specific component of it. If we do so, we can speak about "social environment" (meaning social characteristics of the world around us), "human environment" (everybody except us), "economic environment" (economy surrounding us), "scientific environment", etc. In a less general term, by environment we usually mean Nature; i.e. the world without people and animals. (More often: the world without people, i.e. animals are also part of the environment) If so, the environment is one of the three big systems on Earth (social, economic and environment) and when we speak about sustainability, we consider the overlapping of those three big systems. That is, something (a process) is sustainable, if the environmental, social and economic aspects are "in order". [18]



Picture 43: The three big systems

Similar considerations may distinguish between economic, environmental (ecological), political and cultural aspects and if we want to judge sustainability, we can analyse all the four aspects.

[18] https://en.wikipedia.org/wiki/Social_sustainability



Picture 44: Circles of sustainability

As the sustainability analysis suggests, the “bottleneck” is ecology; it is very far from stability. **That is, if we speak about sustainability of life on Earth, the weak point is ecology**. (Ecology is a science which studies interaction amongst organisms and their environment.[19]

Since no organism can survive without its environment and their interaction, ecological processes are vital for our life. As science declares (and as it can be seen on the diagram “circles of sustainability”, **mankind must address ecological questions as the most important for survival.**

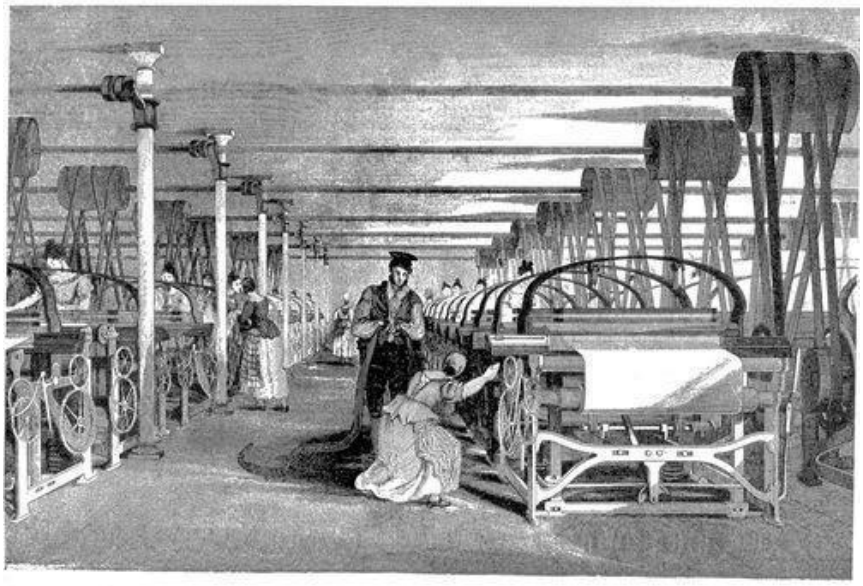
CHANGES IN THE ECOSYSTEM

Any system changes; complex processes alter its characteristics constantly. Changes also include the appearance of some new and disappearance of some old components and characteristics. In order for the system to stay alive for a long period of time, those constant changes must be in balance. (It is important to note: “long time” may mean a totally different length for different actors. For a turtle living a hundred years easily, a hundred years is “normal” while a thousand would be “really long”. For a butterfly living one year, five years is an extremely long time already. On Earth, we usually measure

[19] https://en.wikipedia.org/wiki/Ecology

“long time” as thousand years, while 50 years is already an extremely short period of time.)

Our ecosystem was in long-term balance with mankind till the first industrial revolution, 1760…1850.



Picture 45: Machines appearing in the textile industry in the 18th century

Till then, due to the impact magnitude vs the Nature, the influence of mankind on the whole ecosystem was more or less negligible. That is, till the (first) industrial revolution processes in the ecosystem were “internal processes”; people practically could not influence them. Invention of machines and development of industry changed the situation: “perturbation” of mankind became more and more noticeable, i.e. influence of mankind became stronger and stronger. Those human-generated influences influenced or changed the local environment only (like “Black Country” in England, full of smoke and other pollution) but later on, this local influence became bigger and bigger and now we can talk about global influence. (Chernobyl was first noticed in Sweden; an outburst of a volcano influences the whole atmosphere round the Globe – The Earth “has become small”.

Until the influence of mankind was not really co-measurable with the world's characteristics, the ecosystem behaved as earlier: some resources, some components

disappeared, others appeared. During the last two hundred years or so, influence has become co-measurable with the natural processes, and ever since, human activities started to really influence the status and overall condition of the Globe.

Picture 46: The Black Country

That human influence appeared in two different but interconnected facts:

- resources of the Earth started to be exploited very intensively;
- due to the processes mankind implemented, the amount of waste produced also increased exponentially.

That “resources-waste” process was also known earlier, but the ecosystem managed that phenomenon. The usual situation was: a waste from some process turned to be a resource for some other process. In a very complex way, resources did not decrease considerably and waste did not increase considerably. Further, the Earth ecosystem has a recovery capacity; some resources are regenerated and some waste is also neutralised and/or reused by some other process. That means, the overall balance was kept; maybe there were some local problems like air pollution in the Black Country.

After the industrial revolution (and especially after the Second World War), this situation has changed dramatically. Use of resources became co-measurable with the amount of the resource and the amount of waste started to increase sharply so that it became

impossible for the Globe to cope with it. (We throw around 150 million tons of garbage into the seas and oceans each year…!)[20]

Picture 47: Waste

That is, if earlier the influence of mankind was negligible, now, it is decisive. Pollution has become the problem N1 for mankind. That is – **protection of the environment is really vital for all of us.**

Scientists measure our impact on ecosystems as our **ecological footprint**. In fact, this footprint reflects two fatal processes:

- we use up resources we have on Earth;
- we overload the Earth with our waste.

Ecological footprint depends on lifestyle and practice; and therefore, all of us have our own footstep personally. We can calculate the footstep easily; there are plenty of calculation supports on the Internet like https://www.footprintcalculator.org/food1.

Ecological footprints may be calculated for communities, for regions, countries, and continents and also global. As can be seen by any calculations, **the more advanced (developed) a country is, the bigger its ecological footprint is.**

[20] https://news.nationalgeographic.com/news/2015/02/150212-ocean-debris-plastic-garbage-patches-science/

Footprint is calculated in “global hectares”. That is an artificial unit; it reflects that “how many hectares of global land would be needed to offset the country’s load on Earth. Different countries have different global hectares as their footprint and indeed, those countries really have some amount of hectares in the country. Comparing the available vs used amounts, we may judge that a given country is a “donator” or a “borrower” – the latter meaning it uses up more hectares than available for the given country.[21]

Countries with the Highest Ecological Footprints (2017. data)

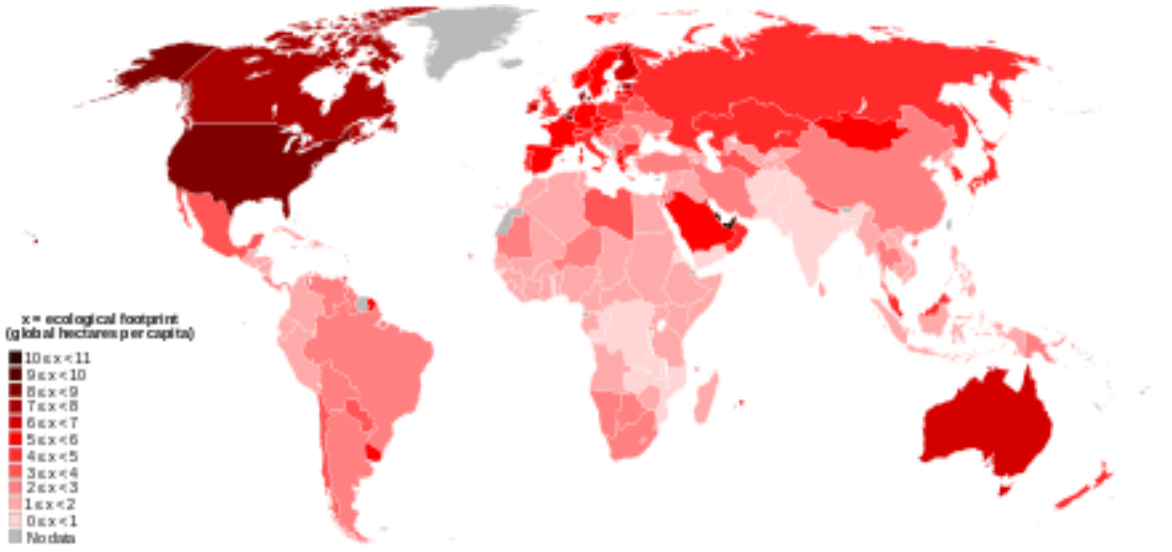
Rank	Country	Ecological Footprint In Global Hectares Per Capita
10	Iceland	6.50

[21] https://www.worldatlas.com/articles/countries-with-the-largest-ecological-footprints.html

On average, rich countries are all borrowers and all poor countries are donors.

On the Internet at the address[22], one can check footprint used vs available by each country. (2007 data!!)

As it can be seen by the map below, the biggest borrower is the United States.



Picture 48: Ecological footstep data map, 2007 data

ENVIRONMENTAL PROTECTION AND THE DIGITAL ERA

Digital Era has caused several crucially important changes in the overall environment protection issue:

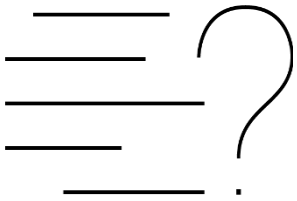
- As it can be seen by any footstep calculation, the biggest component in our load on the environment is carbon dioxide, i.e., our “carbon footprint”. It is caused mostly by a steep increase of energy use; since energy is generated on Earth by burning carbon. Now, with the rise of the Digital Era, new industries have emerged (like information technology) that are much less energy intensive;
- further, digital technology has increased the effectivity of energy use; i.e. the energy used to produce one unit of product has decreased sharply;

[22]https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/List_of_countries_by_ecological_footprint.htm

- digital technology devices themselves use up extremely low amount of energy (down to microwatts);
- digital technology made it possible to sharply increase scientific research and development into the environment protection era;
- digital technology has sharply increased the effectiveness of waste management.

True, digital technology devices themselves (and batteries supplying energy for them) are dangerous waste and we must pay special attention as to how to handle the sharp increase of thrown away, old mobile phones and computers.

HOMEWORK SOLUTIONS



1. Air, land, water, our neighbour, our community for us.
2. Heating, cooking, car driving, lighting (through energy generation for the electricity).
3. Energy management, energy use reduction, new forms of energy generation (not through burning carbon).

ELECTRONIC VERSION

SLIDES	NOTES
ERASMUS+ TOPIC 7. VALUING HUMAN DIGNITY AND HUMAN RIGHTS IN THE DIGITAL ERA MODULE B. PERSONAL, GROUP, NATIONAL VALUES	
WHAT IS „ENVIRONMENT"?	
WHAT IS „ENVIRONMENT"? ENVIRONMENT IS WHAT SURROUNDS US. IT MAY BE NATURAL OR ARTIFICIAL (BUILT) AND OBJECTIVE AND HUMAN. WE LIVE IN THE ENVIRONMENT; WE CANNOT LIVE WITHOUT IT.	
WHAT IS „ENVIRONMENT"? ENVIRONMENT IS WHAT SURROUNDS US. IT MAY BE NATURAL OR ARTIFICIAL (BUILT) AND OBJECTIVE AND HUMAN. WE LIVE IN THE ENVIRONMENT; WE CANNOT LIVE WITHOUT IT. USUALLY, WHEN WE TALK ABOUT „ENVIRONMENT", WE MEAN NATURE AROUND US; FROM LOCAL TO GLOBAL.	

DEVELOPMENT OF „ENVIRONMENT"

FOR A BABY - PARENTS, HOME

DEVELOPMENT OF „ENVIRONMENT"

FOR A BABY - PARENTS, HOME

FOR A TEENAGER - FRIENDS, HOME CITY, COUNTRY

DEVELOPMENT OF „ENVIRONMENT"

FOR A BABY - PARENTS, HOME

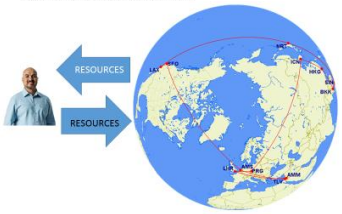
FOR A TEENAGER - FRIENDS, HOME CITY, COUNTRY

FOR AN ADULT - JOB, FAMILY, THE WORLD

WHEN WE LIVE AND WORK, WE USE THE NATURE'S RESOURCES

WHEN WE LIVE AND WORK, WE USE THE NATURE'S RESOURCES

AND WE ALSO RETURN SOME RESOURES



WHEN WE LIVE AND WORK, WE USE THE NATURE'S RESOURCES

AND WE ALSO RETURN SOME RESOURES, BUT ALSO WASTE

USUALLY WE TAKE MORE RESOURCES THAN WE RETURN

WHEN WE LIVE AND WORK, WE USE THE NATURE'S RESOURCES

AND WE ALSO RETURN SOME RESOURES

USUALLY WE TAKE MORE THAN WE RETURN

THAT IS, WE SAY
„WE LOAD OUR ENVIRONMENT"

WHEN WE LIVE AND WORK, WE USE THE NATURE'S RESOURCES

AND WE ALSO RETURN SOME RESOURES

USUALLY WE TAKE MORE THAN WE RETURN

THAT IS, WE SAY
„WE LOAD OUR ENVIRONMENT"

OR,

FIGURATIVELY, WE SAY
„WE LEAVE OUR FOOTPRINT ON THE ENVIRONMENT"

We need food, shelter and heating (in some locations) to survive.
Our planet's ecological resources help fulfill these needs.
But how many resources do we consume?
This question can be answered using the Ecological Footprint.

WE LEAVE OUR FOOTPRINT ON EVERYTHING:

WE CALL IT „ECOLOGICAL FOOTPRINT"

The Ecological Footprint can be calculated for a single individual, city, region, country and the entire planet.

Ecological footprint

„GLOBAL HECTARES"= 12 BILLION HECTARES

OUR GLOBE HAS RESOURCES AND CAN GENERATE NEW RESOURCES AND REGENERATE WASTE;

WHILE LIVING, MANKIND USES THE GLOBE'S RESOURCES AND PRODUCES WASTE; AND ALSO CAN GENERATE SOME RESOURCES AND RETURN THEM TO THE GLOBE

MANKIND = 7 BILLION PEOPLE

PER CAPITA GLOBAL LAND= 12 BILLION HECTARES/7 BILLION PEOPLE = 1.72 GLOBAL HECTARES

„GLOBAL HECTARES"= 12 BILLION HECTARES
OUR GLOBE HAS RESOURCES AND CAN GENERATE NEW RESOURCES AND REGENERATE WASTE;
RESOURCES DO NOT DIMINISH, PROCESS IS SUSTAINABLE
WHILE LIVING, MANKIND USES THE GLOBE'S RESOURCES AND PRODUCES WASTE; AND ALSO CAN GENERATE SOME RESOURCES AND RETURN THEM TO THE GLOBE
MANKIND = 7 BILLION PEOPLE
PER CAPITA GLOBAL LAND= 12 BILLION HECTARES/7 BILLION PEOPLE = 1.72 GLOBAL HECTARES

„GLOBAL HECTARES"= 12 BILLION HECTARES
OUR GLOBE HAS RESOURCES AND CAN GENERATE NEW RESOURCES AND REGENERATE WASTE;
RESOURCES DO NOT DIMINISH, PROCESS IS SUSTAINABLE
RESOURCES DIMINISH, PROCESS IS NOT SUSTAINABLE
WHILE LIVING, MANKIND USES THE GLOBE'S RESOURCES AND PRODUCES WASTE; AND ALSO CAN GENERATE SOME RESOURCES AND RETURN THEM TO THE GLOBE
MANKIND = 7 BILLION PEOPLE
PER CAPITA GLOBAL LAND= 12 BILLION HECTARES/7 BILLION PEOPLE = 1.72 GLOBAL HECTARES

PER CAPITA GLOBAL LAND AVAILABLE: 1.72 HA

PER CAPITA GLOBAL LAND AVAILABLE: 1.72 HA
MANKIND USES TODAY: 2.89 HA

PER CAPITA GLOBAL LAND AVAILABLE: 1.72 HA
MANKIND USES TODAY: 2.89 HA
MANKIND DOES NOT LIVE A SUSTAINABLE LIFE

PER CAPITA GLOBAL LAND AVAILABLE: 1.72 HA
MANKIND USES TODAY: 2.89 HA
MANKIND DOES NOT LIVE A SUSTAINABLE LIFE
AS WE LIVE TODAY, WE WOULD NEED 1.7 EARTHS BUT WE HAVE ONLY ONE...
1.7 planets
needed to support humanity's demand on Earth's ecosystems

WE LIVE BEYOND OUR OPPORTUNITIES,

WE MISUSE, OVERLOAD OUR ENVIRONMENT.

WE MUST PROTECT OUR ENVIRONMENT!

WE USE MORE RESOURCES THAN THE EARTH CAN PROVIDE –

WE OVERSHOOT…

WORLD OVERSHOOT DAY – TILL WHEN WE USE RESOURCES WHAT THE EARTH PRODUCES IN ONE YEAR

IN 2018: 1st AUGUST

COMPONENTS OF THE ECOLOGICAL FOOTPRINT

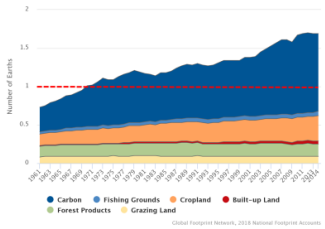
- **FOOD – WHAT YOU EAT**
- **GOODS – WHAT YOU BUY**
- **SHELTER – THE HOUSE YOU LIVE IN**
- **MOBILITY – HOW MUCH AND HOW FAR YOU TRAVEL**

COMPONENTS OF THE ECOLOGICAL FOOTPRINT

- FOOD – WHAT YOU EAT **EAT LESS MEAT; EAT LOCAL**
- GOODS – WHAT YOU BUY **BUY WHAT YOU REALLY NEED**
- SHELTER – THE HOUSE YOU LIVE IN **INSULATE IT WELL, DO NOT WASTE ENERGY**
- MOBILITY – HOW MUCH AND HOW FAR YOU TRAVEL **DO NOT TRAVEL USELESS**

THE BIGGEST LOAD ON EARTH IS CO2

World Ecological Footprint by Land Type



IF WE WANT TO PROTECT THE ENVIRONMENT, WE MUST REDUCE CO2

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What are resources?

a) The colour of the world
b) There are no resources in the world
c) **They are what allow to perform some functions**
d) The world is resources
e) I do not know

2. What is waste?

a) waste what is needed to perform some actions
b) **waste is residual produced when we perform some actions**
c) waste is what is very useful for everybody
d) waste is what is in the air
e) waste is what we all need

3. **What is an “ecological footprint”?**
    a) the size of our shoes
    b) **it is how big our load is on the environment**
    c) it is how far we can jump
    d) it is the number how many we are
    e) it is the load of the environment on us

4. **What is “world overshoot day”?**
    a) it is the day we can shoot the longest
    b) it is when the world overshot us
    c) **it is when we used up all those resources what the world can regenerate in one year**
    d) it is the day we cannot use our resources further
    e) it is when the world overshot the day

5. **What is the most dangerous waste and why?**
    a) the air because it is clear
    b) the soil because it is dirty
    c) the water because it is cold
    d) **CO2 because it leads to climate change (global warming)**
    e) sea water since it is salty

6. **What is the biggest part of our ecological footprint?**
    a) the food we consume
    b) the house we live in
    c) the animals that live with us
    d) **the carbon dioxide-footprint**
    e) the water-footstep

7. **What happens if we overuse the world's resources?**
    a) nothing
    b) it will be dark on the Globe
    c) it will be warm in the world
    d) we cannot overuse them
    e) **the world becomes not sustainable and we make life of our children very difficult**

8. **Are all nations overusing their resources?**
    a) yes, all of them
    b) no, none of them
    c) **no; just the developed countries**
    d) no, just the African countries
    e) yes, all countries in South America

9. **How can we decrease CO2 emission?**
    a) we cannot decrease it
    b) we should not decrease it
    c) **we must decrease energy use and change for renewable energy sources**
    d) we burn it
    e) no; we should increase it

10. **Is the waste good for nothing?**
    a) yes, it is good for nothing
    b) **no; a waste from some process may be a resource for another process**
    c) we do not produce waste
    d) we use all waste we produce
    e) in fact, all waste is useful

TRUE – OR – FALSE SENTENCES

1. Environment is what surrounds us. **TRUE**
2. Environment is a waste. **FALSE**
3. We must protect our environment**. TRUE**
4. We cannot use waste for anything; it is useless. **FALSE**
5. CO2 is produced when we burn coal. **TRUE**
6. CO2 can be reduced by burning it. **FALSE**
7. Our ecological footprint shows how big our load is on the environment. **TRUE**
8. Most developed countries overuse their own resources. **TRUE**
9. All African countries overuse their own resources. **FALSE**
10. We must use energy more effectively to reduce our footprint. **TRUE**

OPEN – END QUESTIONS

1. What is the environment? *(What surrounds us?)*
2. What is the ecological footprint? *(It shows how big our load is on the environment.)*
3. What is a waste? *(What remains after we use some resources?)*
4. Is waste always useless? (*No, some waste may be a resource for some other process.*)
5. What is the most dangerous waste? *(Carbon dioxide)*

OPEN – END SENTENCES

1. Carbon dioxide is a dangerous waste, since … *(it causes climate change).*
2. In our developed countries, we use … *(more)* resources than we have.
3. In 2018, World Overshoot Day was in … *(August).*
4. We can reduce CO2 emission by … *(increasing energy efficiency and using more renewable energy sources).*
5. Mankind uses up … *(more)* resources than we have.

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what environmental protection is.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Environmental protection is of general importance in life: pupils should fully understand that protecting the environment is of vital importance and each person has constant tasks in it.
4. Understanding of the notion „ecology and ecological footprint" is vital in general terms also: it makes pupils understand that they must be active and energetic to fight for a cleaner environment.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

   The following themes are proposed for the pupil's minilecture:

   - What is an ecosystem?
   - What is pollution?
   - What is and how big is our ecological footstep? (Concrete calculations)
   - Digital Era and protection of the environment.
   - Debates or brainstorming over some concepts

   The following themes are proposed for debates or brainstorming:

   - What does ecological footstep mean?
   - How to decrease our footstep?
   - Specifically, how to protect our local environment?

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
3. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
4. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
    - https://www.youtube.com/watch?v=Xh_Lk7kDrUI (industrial revolution, 3’33”)
    - https://www.youtube.com/watch?v=xLhNP0qp38Q (industrial revolution; 3’58”)
    - https://www.youtube.com/watch?v=fACkb2u1ULY (ecological footprint; 1”20”)
    - https://www.youtube.com/watch?v=g_aguo7V0Q4 (ecological footprint; 6’13”)
    - https://www.youtube.com/watch?v=bKSGKFUBrGc (environmental protection; 3’30”)

- https://www.youtube.com/watch?v=yV2EK2bMgwk (environment protection; 4’19”)

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows the use of the given questions as homework, as a competition or as a support for class work. If it is used in the classwork, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**PROTECTION OF THE ENVIRONMENT IN THE DIGITAL ERA**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise: • what environment is and how it changes as we grow up; • what we usually mean when we say “environment”; • what it means that “we load our environment”; • what our ecological footprint means; • what “world overshoot day” means and what we have to do to return it to normal.
Materials needed:	Textbook, PowerPoint presentation, smart-board, projector, poster papers, marker pens
Preparation & Prerequisites:	Teacher will have previously read the TSM and the textbook, together with the electronic version (PPT).
Subjects involved	• systems • energetics • ecology • biology

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss’ mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is the environment?**
- **What is pollution?**
- **What is waste?**

Teacher makes sure that students understand what ecology is and what its characteristics are. **Interaction:** T-Ss, Ss – Ss **Time to be allocated**: 10 min.
Activity two: Ecosystem processes earlier and now **Procedure**: It can be a game. Students write their own samples for process components in their surroundings and the teacher evaluates their guesses. English language is the language of the internet, so the teacher can speak about the importance of English learning **Interaction:** T – Ss, Ss – T, Ss –Ss **Time to be allocated**: 8 min.
Activity three: How big is our ecological footprint? **Procedure**: Students discuss and calculate someone's footprint in the class. Comments on the results. Ways and means of reducing the footprint. **Interaction:** T-Ss, Ss –T **Time to be allocated**: 10 min.
Activity four: Discussion about Digital Era characteristics in environmental protection **Procedure**: Teacher introduces the question and students speak about it. Discussion points will be: the signs and symptoms of energy saving through digital technology. How the Digital Era influences ecological sustainability in general and in the pupils' society. **Interaction:** T-Ss, Ss-Ss **Time to be allocated**: 12 min.
Activity five: Summary of the module, discussion of a possible homework **Procedure**: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign homework to the pupils. **Interaction:** T-Ss **Time to be allocated**: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brainstorming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Social_sustainability
- https://en.wikipedia.org/wiki/Ecology
- https://en.wikipedia.org/wiki/Ecology
- https://www.footprintcalculator.org/food1
- https://www.worldatlas.com/articles/countries-with-the-largest-ecological-footprints.html
- https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/List_of_countries_by_ecological_footprint.html
- https://en.wikipedia.org/wiki/Environmental_protection
- https://en.wikipedia.org/wiki/Environmental_globalization
- https://en.wikipedia.org/wiki/Natural_environment

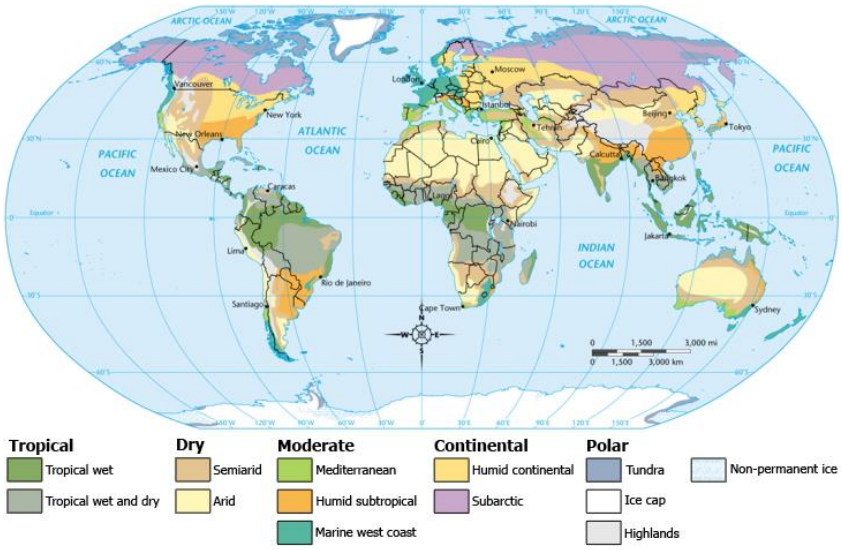
C. FIGHTING THE CLIMATE CHANGE

CLIMATE

Climate is the long-term, statistical characteristics of the weather. It is characterised mainly by temperature, precipitation, and wind. The crucial factor among those is temperature; the other two depend mostly on it. Precipitation (rain) is water falling out from the air: heat evaporates water and the water vapour is in the air. Warmer air can contain more vapour, cooler – less and the difference falls out as water. So, when the temperature of the air falls, we experience rain. Furthermore, hot air is less heavy than the cold air, so when the air temperature decreases, the air rises and it is replaced by cooler air. That movement of the air is wind.

One more adjective should be added to the above definition: climate understood for large territories. For local places, singularities may occur (the nickname of Chicago is “the Windy City”; Death Valley is legendarily dry (hence its name) – but just in some tens of kilometres, the mountains, the 3368-meter high Telescope Peak is cold and is covered with eternal snow.[23] () That is why “climate” is understood as a characteristic for bigger territories, global zones on Earth. (Albeit we can of course speak about “local climate” as well.)

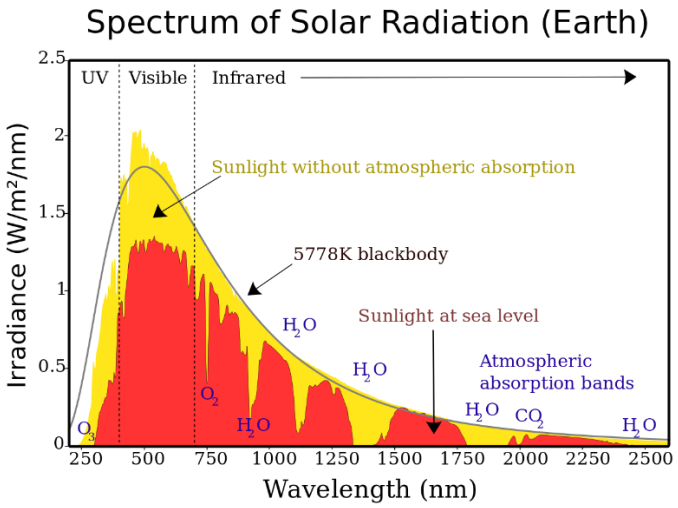
[23] See https://www.visitcalifornia.com/destination/spotlight-death-valley-national-park



Picture 49: Global climate zones

TEMPERATURE

Temperature is the main characteristic of heat energy; the reason (and also the result) of constant movement of material particles. Kinetic energy of the moving particles is continuously turn into heat energy and the kinetic energy is the result of the previous amount of heat energy. The source of that “original heat” is our Sun. The Sun is an immense nuclear reactor burning 600 million tons of hydrogen (and turning it into helium) per second. The surface of Sun irradiates radiation of different wavelengths into the Universe and some of those “sun rays” hit our Globe. Some portions of those ways are absorbed by the atmosphere (see by yellow on the diagram below; some parts are also reflected back into the Universe) but the most part of the rays hit the surface of the Globe and heat it.



Picture 50: Spectrum of solar radiation

Heat energy is conveyed by the infrared (longer wavelength) rays. But those infrared rays also do not fully remain on the Earth; some are reflected back – and if our atmosphere lets them through, they go into the Universe “useless”. Infrared sun rays absorbed by the surface of the Earth and also those that are captured in the atmosphere heat our world.

Absorption of the rays depends on the characteristics of the material surface and also on the angle the ray hits the surface. The more perpendicular the incoming ray is, the more proportion of it is absorbed. That is the main reason why temperature towards the equator is always higher and towards the poles, lower. Further, white colour surfaces reflect the rays more and that is the second reason why the poles are cold: they are covered with snow.

GREENHOUSES

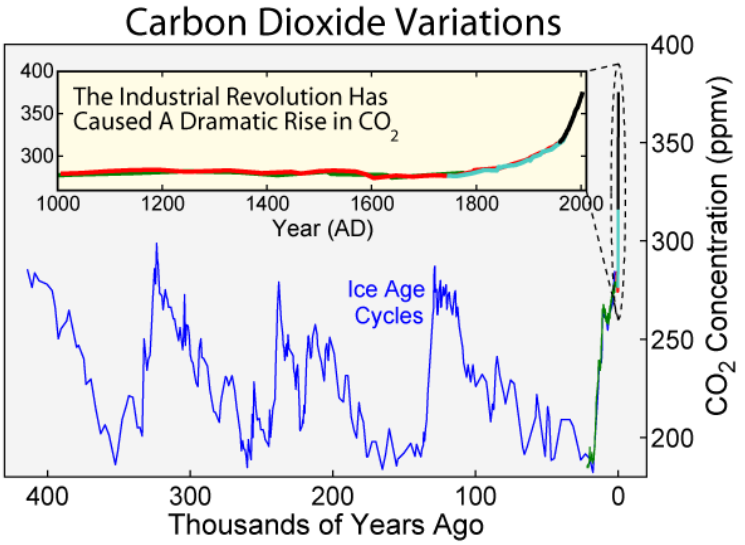
Plants (and indeed, animals and humans) need warmth to live and grow. If the place is not warm enough, we heat it up. Mankind noticed long ago, that not really knowing what is going on with the sun rays in the atmosphere, it can “copy” the process: we let the sun rays in but do not let them go out; we “re-reflect” them back to the surface. Such buildings are called greenhouses (since usually green plants like vegetables are grown there.) Since greenhouses are made of glass, they are also called “Glasshouses". The glass lets

the infrared rays of the Sun through but does not let them out, i.e., reflected rays are re-reflected to the surface. Glass behaves like a heat mirror and the temperature inside such greenhouses is very considerably higher (without any heating) than the outside temperature.

GREENHOUSE GASES

Scientists have discovered that some gases in the atmosphere seriously change the absorption capability of it: considerably increase the amount of “captured” infrared rays; do not let them go back into the Universe. Such gases behave like a heat mirror: they re-reflect the rays to the surface and thus, like in a greenhouse, considerably heat it. Most notably, such gas is the carbon dioxide, the methane, the nitrous oxide. CO2, NH4, N2O are called greenhouse gases. (There are many more, but their concentration is low in the atmosphere.)

Such gases have always been in the atmosphere, and their concentration was constant for hundreds of thousands of years. The most sinister among them is carbon dioxide. Its concentration in the atmosphere was around 250 ppm (=parts per million) and even if it fluctuated over the years, the value never went higher than 300 ppm. The first industrial revolution (1770…1850) was a critically sharp turning point: the need for more energy has increased dramatically and the basic source for energy has always been carbon. (Coal is carbon plus some other unnecessary materials; oil and natural gas are hydrocarbons and when we burn oil or gas, it is the carbon content of them that produces the energy.



Picture 51: Carbon dioxide variations

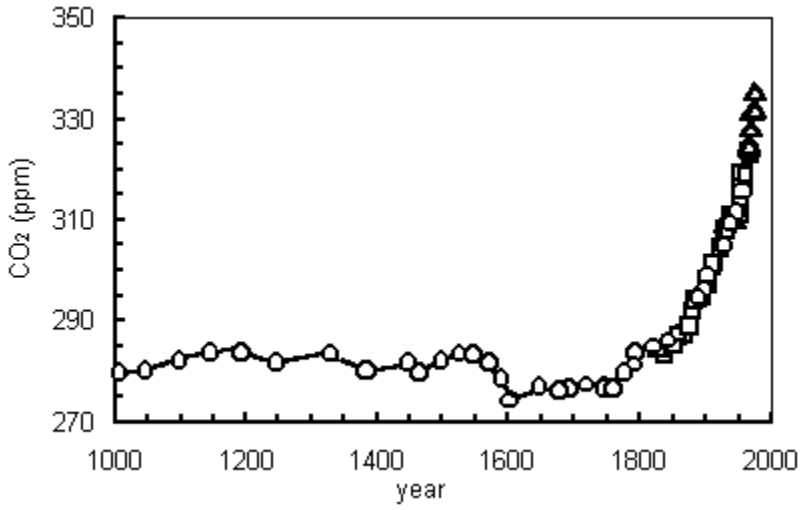
A question may arise, how we know the values of 200, 300, 400 thousand years ago. It is checking different layers of eternal ice on the poles: materials always absorb some amount of other materials on their surface and the CO2 concentration of the ice existing for many thousand years can be easily measured. In turn, the age of the given ice layer (and any other material) can be measured by the so-called **Radiocarbon dating.** The method is quite simple: radioactive isotope of carbon, carbon-14, can be used to figure out how old some objects are or when something died. As long as something is on the surface of the earth and taking in carbon, the amount of carbon-14 stays the same. When an object stops taking in carbon, the carbon-14 amount goes down. Because the half – life (how long it takes for half of a radioactive isotope to go away) of carbon-14 is 5730 years, scientists can see how old the object is by how much carbon-14 is left.

So (as it was also described in the previous module) energy demand increase was satisfied by producing energy through burning carbon. The reaction (burning, oxidation) is very simple:

C + O2 = CO2

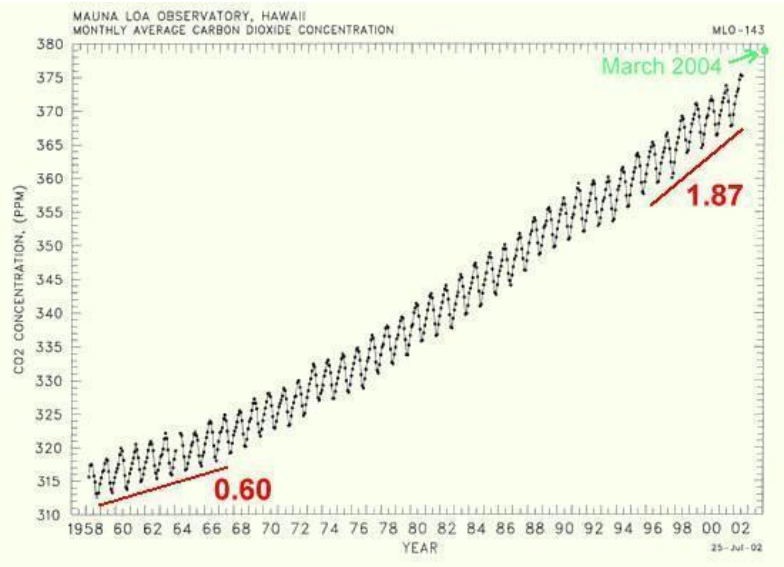
Carbon is an extremely useful material on Earth (basically, our life is based on carbon) – but CO2 is a waste; a material not used by us for anything. In the 18 and 19 centuries, sharp increases in CO2 concentration did not hit dangerous levels, but WW2 was again

a turning point: CO2 “production” (i.e., its concentration in the atmosphere) increased yet faster. (Please compare the tails of the following diagram and the previous one.)



Picture 52: CO2 concentration over the years

Similar results are measured (and calculated) by the Mauna Loa Observatory; situated on the highest level on Earth:



Picture 53: Carbon dioxide in the atmosphere, Mauna Loa Observatory, Hawaii

(The yearly fluctuations are caused by the concentration difference in summer and winter)

In our days, CO2 concentration has passed 400 ppm. Such a change has led to grave consequences: increased CO2 concentration has increased the amount of infrared sunrays re-reflected to the surface of the Earth and has caused increase of the temperature. It has led to remarkable changes in the atmosphere; it caused climate change. (It is also called global warming.)

The effect of global warming is grave: temperatures go up, summers become hotter and drier, winters milder; the usual cycle of freezing – melting was shifted towards melting. The snow-cap and ice-cover on the poles are decreasing; more and more snow and ice are melted, the level of the seas rise.[24]

Ice cap melting results are really visible:

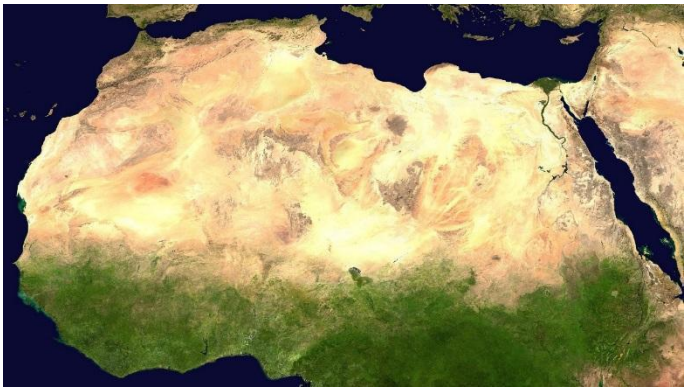
Picture 54: Polar ice cap melting

Further, other visible examples are the glaciers also melting, some even disappearing:

[24] See YouTube: https://www.youtube.com/watch?v=VbiRNT_gWUQ

Picture 55: Glacier melting due to global warming

Due to global warming, hotter summers and milder winters definitely caused the tropic and subtropic zones to increase, and the humid continental zone is shifted Northwards. Permafrost (permanent frost) areas are decreasing (that is, Siberia may become the most effective land for crops and wheat) and at the same time, desert areas like the Sahara are slowly creeping towards the North.



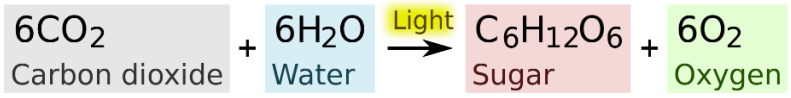
Picture 56: Sahara, the biggest hot desert creeping towards Europe

Global warming changes our life entirely. The issue must unify human society on Earth, because it is a threat to the whole of mankind. (As a side effect, we can surely expect a huge movement of large numbers of people also moving north, after seeking survival opportunities. (Today's refugee crisis is part of this new huge migration.)

FIGHTING GLOBAL WARMING

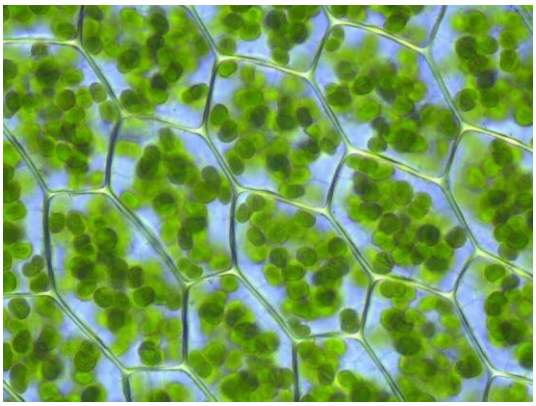
The catastrophic effect of global warming is reinforced by the fact that it is a very slow phenomenon. If mankind would stop emitting CO2 into the atmosphere, the global temperature would still grow for decades. So, emission of CO2 must be reduced as soon as possible.

In fact, Nature also has a self-defending procedure. Green plants inhale CO2 and through photosynthesis, turn it (plus water) into oxygen and sugar:



Picture 57: Photosynthesis

That is, if we could keep the balance between the carbon dioxide emitted by mankind and oxygen emitted by the plant, there would be no problem at all; the balance could be maintained.



Picture 58: Chloroplasts conducting photosynthesis

Here, the problem is twofold:

- mankind emits more and more CO2;
- the green surface area of the plants decreases sharply

Nature herself alone cannot fight and balance the activities (i.e., CO2 emission) of mankind. We must reduce CO2 emission into the atmosphere.

As it was described also in the previous module, the main reason (source) of the CO2 emission is carbon burning, which is still by far the biggest source for energy generation. Here, we must fight in two directions:

a. Decreasing the energy use is a no-go; mankind is not capable of doing that. We cannot go back to the Stone Age. However, we can and must increase energy effectiveness, i.e. get more and more results using relatively less and less energy.

b. Turn sharply to alternative energy resources which are not based on burning fossil energy. We do have such resources:
    - Alternative energy resources like wind energy, solar energy, geothermal energy.
    - From the viewpoint of fighting global warming, nuclear energy is always a known and effective solution. However, due to nuclear hazards (Three Mile Island, Chernobyl, Fukushima), many people think the hazard is much bigger than the benefit regarding global warming.

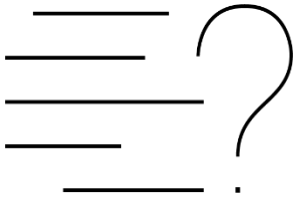
One of the most promising solutions is solar energy. Solar cells (more precisely: photovoltaic solar cells) turn sunshine into electricity.

Picture 59: Solar cells on the roof of a house

Solar energy could be a general solution: solar rays convey such an amount of energy to the Earth in one day that mankind uses in one and a half years. And the energy of the Sun is enough for billions of years… Of course, there are still a lot of questions that must be answered, efficiency increased, economic issues solved – but mankind is on the right way to solve the energy issue – combined with the global warming issue too.

It is important to note that solar cells are also the results of the Digital Era: solar cells are also a semiconductor, like memories, microprocessors, sensors and the like.

CONTROL QUESTIONS



1. Because energy is generated through burning coal and the oxidation process yields CO2: C + O2 = CO2.

2. Glass roofs let the sunshine in but do not let out; more solar energy remains inside and thus the greenhouse is heated.

3. Go to see, e.g. YouTube https://www.youtube.com/watch?v=Vj1G9gqhkYA or https://www.youtube.com/watch?v=qHE0n5c6-6g

4. Energy efficiency growing, using alternative energy sources like solar or wind.

ELECTRONIC VERSION

SLIDES	NOTES
VII. TOPIC SOCIAL RESPONSIBILITY FOR THE FUTURE 3. MODULE **FIGHTING THE CLIMATE CHANGE**	
CLIMATE **IS A STATISTICS OF WEATHER OVER LONG PERIODES OF TIME.**	
CLIMATE **IS A STATISTICS OF WEATHER OVER LONG PERIODES OF TIME.** CLIMATE ZONES ON EARTH 	

CLIMATE
IS A STATISTICS OF WEATHER OVER LONG PERIODES OF TIME.

CLIMATE CHANGE

IS A **CHARACTERISTIC AND LONG-TERM CHANGE** IN
THE STATISTICS OF WEATHER OVER LONG PERIODS OF TIME

CLIMATE
IS A STATISTICS OF WEATHER OVER LONG PERIODES OF TIME.

CLIMATE CHANGE

IS A **CHARACTERISTIC AND LONG-TERM CHANGE** IN
THE STATISTICS OF WEATHER OVER LONG PERIODS OF TIME

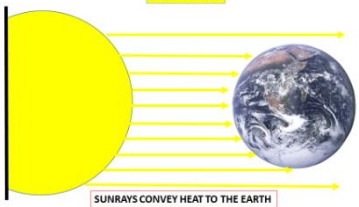
TODAY, WE EXPERIENCE RISE IN THE TEMPERATURES,
SO INSTEAD OF „CLIMATE CHANGE", WE MAY SAY
„GLOBAL WARMING".

WHAT DETERMINES THE TEMPERATURE ON THE EARTH?

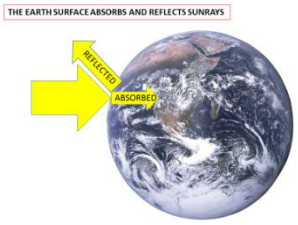
THE SUN.

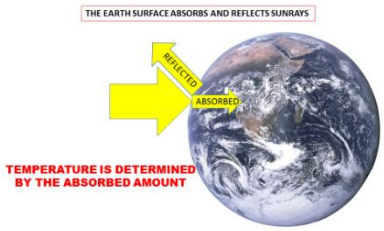
WHAT DETERMINES THE TEMPERATURE ON THE EARTH?

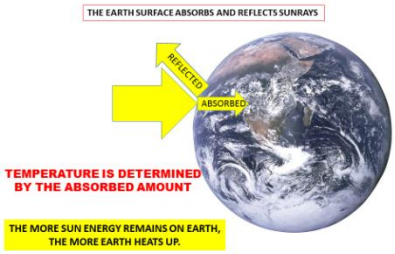
THE SUN.

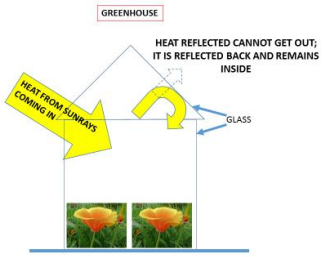


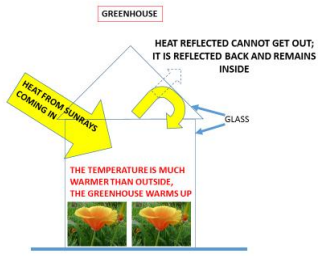
SUNRAYS CONVEY HEAT TO THE EARTH


THE EARTH SURFACE ABSORBS AND REFLECTS SUNRAYS
REFLECTED
ABSORBED


THE EARTH SURFACE ABSORBS AND REFLECTS SUNRAYS
REFLECTED
ABSORBED
TEMPERATURE IS DETERMINED BY THE ABSORBED AMOUNT


THE EARTH SURFACE ABSORBS AND REFLECTS SUNRAYS
REFLECTED
ABSORBED
TEMPERATURE IS DETERMINED BY THE ABSORBED AMOUNT
THE MORE SUN ENERGY REMAINS ON EARTH, THE MORE EARTH HEATS UP.

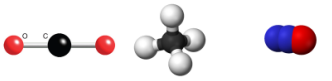

GREENHOUSE
HEAT REFLECTED CANNOT GET OUT; IT IS REFLECTED BACK AND REMAINS INSIDE
HEAT FROM SUNRAYS COMING IN
GLASS


GREENHOUSE
HEAT REFLECTED CANNOT GET OUT; IT IS REFLECTED BACK AND REMAINS INSIDE
HEAT FROM SUNRAYS COMING IN
GLASS
THE TEMPERATURE IS MUCH WARMER THAN OUTSIDE, THE GREENHOUSE WARMS UP

NOT ONLY GLASS CAN BEHAVE LIKE A „HEAT MIRROR", BUT SOME GASES IN THE ATMOSPHERE TOO. THOSE ARE THE „GREENHOUSE-EFFECT GASES"

SUCH ARE:

CARBON DIOXIDE	METHANE	NITROUS OXIDE
CO_2	CH_4	N_2O



AND MANY MORE...

OUR LIFE AND ORGANISMS ARE „CARBON-BASED" AND PRACTICALLY ALL ENERGY ON EARTH IS A RESULT OF CARBON BURNED.

OUR LIFE AND ORGANISMS ARE „CARBON-BASED" AND PRACTICALLY ALL ENERGY ON EARTH IS A RESULT OF CARBON BURNED.

↓

BURNING = OXIDATION, I.E. COMBINATION WITH OXIGEN,
$C + O_2 = CO_2$

OUR LIFE AND ORGANISMS ARE „CARBON-BASED" AND PRACTICALLY ALL ENERGY ON EARTH IS A RESULT OF CARBON BURNED.

↓

BURNING = OXIDATION, I.E. COMBINATION WITH OXIGEN,
$C + O_2 = CO_2$

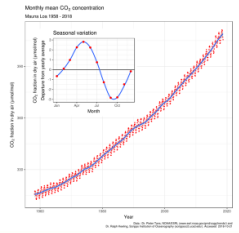
↓

THE MOST COMMON (=MOST DANGEROUS) GREENHOUSE GAS IS CARBON DIOXIDE.

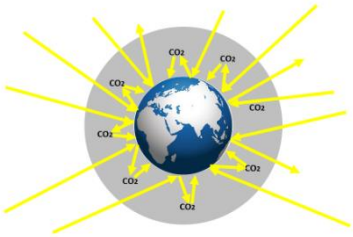
AFTER INDUSTRIAL REVOLUTION IN THE 18. CENTURY, (1760....1830)
CARBON DIOXIDE CONTENTS OF ATMOSPHERE HAS INCREASED TREMENDOUSLY

BEFORE 1950, CO_2 CONTENTS HAD NEVER BEEN ABOVE 300 (ppm) OVER 400.000 YEARS.
SINCE THE INDUSTRIAL REVOLUTION, THE INCREASE IS EXTREMELY FAST.

THE INCREASE OF CO2 CONTENTS IN THE ATMOSPHERE IS ESPECIALLY FAST IN THE LAST FIFTY YEARS:

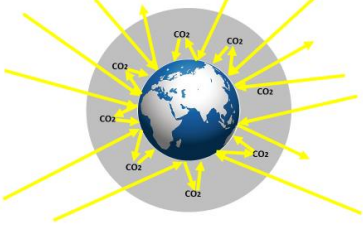


CARBON DIOXIDE WORKS AS A HEAT MIRROR: IT RE-REFLECTS THE HEAT BACK TO THE EARTH



CARBON DIOXIDE WORKS AS A HEAT MIRROR: IT RE-REFLECTS THE HEAT BACK TO THE EARTH

THE RESULT: GLOBAL WARMING, CLIMATE CHANGE



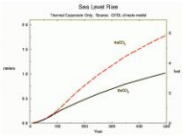
FIGHTING THE CLIMATE CHANGE

MEANS

DECRESE EMISSION OF CO_2 INTO THE ATMOSPHERE

CONSEQUENCES OF THE GLOBAL WARMING

ICE ON THE POLES MELTS, SEA LEVEL RISES



MAP OF EUROPE IF ALL THE ICE IS MELTED

CONSEQUENCES OF THE GLOBAL WARMING

EXTREMELY LOW LEVEL OF WATER IN RIVERS (PHOTO: DANUBE)

IF WE DO NOT FIGHT THE CLIMATE CHANGE, THE ENVIRONMENT WILL BE LIKE THIS...

PREVENTING IT – IT IS OUR SOCIAL RESPONSIBILITY FOR THE FUREURE

WHAT PRODUCES CARBON DIOXIDE..?

(BRAIN STORMING)

HOW TO REDUCE EMISSION OF CARBON DIOXIDE..?

(BRAIN STORMING)

DO NOT PLAY WITH THE EARTH...! WE HAVE ONLY ONE...!
WHAT DO WE LEAVE TO OUR GRANDCHILDREN...?!

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is the climate?

a) it is when raining
b) it is when sunshine
c) **it is statistical weather characteristics over a long period of time**
d) it is weather statistics over a short period of time
e) we do not have a climate

2. In what climate zone is Europe?

a) **mostly in the moderate and Mediterranean**
b) in Nordic
c) in the tropic
d) in the polar
e) in subtropics

3. **Why is CO2 dangerous?**
    a) because it burns
    b) because it does not burn
    c) because it is heavy
    d) **because it leads to climate change**
    e) because it contains oxygen

4. **What is the basic process yielding CO2?**
    a) sunbathing
    b) swimming
    c) sleeping
    d) **burning carbon**
    e) walking

5. **What can we do to fight climate change?**
    a) nothing
    b) we can burn it
    c) we can put it under high pressure
    d) we do not have to fight it
    e) **we must reduce CO2 emission**

6. **What is a greenhouse?**
    a) **a house made of glass that does not let heat out**
    b) a house in green colour
    c) a house in the field
    d) a young house
    e) there are no greenhouses in the world

7. What is a greenhouse effect?

a) a house that is closed
b) an effective house in green
c) **when something behaves like a greenhouse; that does not let heat out**
d) when the house is painted in green
e) when it is colder inside than outside

8. What do we call “greenhouse gases”?

a) gases that are green
b) gases that are in a greenhouse
c) gases that come from a greenhouse
d) **gases that cause greenhouse effect**
e) we do not have greenhouse gases

9. What is the most dangerous greenhouse gas?

a) **carbon dioxide**
b) oxygen
c) nitrogen
d) gasoline
e) hydrogen

10. What is global warming?

a) when it is warming in July than in May
b) when it is warmer in May than in July
c) when summer is warmer than winter
d) when we are cold
e) **when the overall temperature in the world increases**

TRUE – OR – FALSE SENTENCES

1. Climate is when it is cold. **FALSE**
2. Climate is when it rains. **FALSE**
3. Tropical zone is around the equator. **TRUE**
4. The Polar zone is around the South and North Poles. **TRUE**
5. The CO2 is around 400 ppm in the atmosphere these days. **TRUE**
6. CO2 concentration was around 300 ppm for a very long time. **TRUE**
7. Greenhouse is when a glass house does not let the heat out. **TRUE**
8. Greenhouse gas is when the gas does not let the heat out. **FALSE**
9. CO2 is not a greenhouse gas. **FALSE**
10. We can reduce CO2 if we use energy more effectively. **TRUE**

OPEN – END QUESTIONS

1. What is the climate? *(Long-term statistical characteristics of the weather.)*
2. What is a greenhouse? *(A house made of glass that lets the heat in but not out.)*
3. What is a greenhouse gas? *(A gas that causes a similar effect as the glasshouse.)*
4. Why is global warming dangerous? *(Since it changes the climate that becomes hotter and drier.)*
5. How to fight climate change? *(By reducing CO2 emission into the atmosphere.)*

OPEN – END SENTENCES

1. Global warming is … *(when the temperature of the atmosphere increases).*
2. CO2 is a greenhouse gas, since … *(it does not let the heat out).*
3. Climate change is dangerous, since … *(it leads to a hotter, drier climate).*
4. To fight climate change, we must … *(reduce CO2 emission into the atmosphere).*
5. To reduce CO2 emission into the atmosphere … *(we must use energy much more effectively).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what climate change is and how to fight it.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Global warming is of general importance in life: pupils should fully understand that fighting climate change is of vital importance and each person has constant tasks in it.
4. Understanding of the notion „climate change" is vital in general terms also: it makes pupils understand that they must be active and energetic to fight for it.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

   The following themes are proposed for the pupil's minilecture:

   - What is climate and which factors are the most important for it?
   - What is energy generation?
   - New and renewable energy sources
   - Digital Era and fighting global warming.
   - Debates or brainstorming over some concepts

   The following themes are proposed for debates of brainstorming:

   - Why do we produce CO2?
   - How to decrease CO2 emission?
   - What are the consequences of global warming?
   - How to reduce carbon dioxide emission?

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm .

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slides No 29. and 30. are meant to introduce brainstorming. Alternatively, they also may be used for preliminary group discussion and report back.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using electronic version may become very effective.¨
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
    - https://www.youtube.com/watch?v=eHMLszamZ9w (climate change, 2'03")
    - https://www.youtube.com/watch?v=ifrHogDujXw (climate change, 5'49")
    - https://www.youtube.com/watch?v=BTncjs89l-s (climate change, 5'20")
    - https://www.youtube.com/watch?v=UKKYt6fWob8 (climate change, 11'20")
    - https://www.youtube.com/watch?v=kteMXaUNvlc (climate change, 4'31")
    - https://www.youtube.com/watch?v=07PYCbcMgio (climate change, 5'26")
    - https://www.youtube.com/watch?v=VbiRNT_gWUQ (How Earth would like if all the ice is melted; 2'44")

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest that minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just samples; good answers may be formulated in other words as well.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**FIGHTING THE CLIMATE CHANGE**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise: • what "climate" is; • what is the most important factor determining the climate on Earth; • what happens to the sun rays hitting the atmosphere and surface of the Earth; • how a greenhouse works and what is "greenhouse effect"; • which are the most important greenhouse gases; • what are the characteristics of the climate change (global warming); • what are the most important tasks in fighting climate change?
Materials needed:	Textbook, Power-point presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the TSM and the textbook, together with the electronic version (PPT).
Subjects involved	• systems • energetics • ecology • chemistry

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood; To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What is the climate?**

- **What determines the climate?**
- **What is a greenhouse?**

Teacher makes sure that students understand what sustainability is and what its characteristics are.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity two: What do you think: what is a greenhouse and how does it work?

Procedure: It can be a report back or a small lecture too. The English language is the language of the internet, so the teacher can speak about the importance of English learning.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 8 min.

Activity three: Why do we produce CO2 and why is it dangerous?

Procedure: Students discuss why we produce carbon dioxide and what the problem with it is.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity four: Discussion about new and renewable energy sources

Procedure: Teacher introduces the question and students speak about it. Discussion points will be: the good solutions nearby the given school. NRES solutions the pupils are aware of and their possible use.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 12 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brainstorming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Sunlight#/media/File:Solar_spectrum_en.svg
- https://www.quora.com/Which-wavelength-or-color-of-sunlight-contains-the-most-heat
- https://simple.wikipedia.org/wiki/Carbon
- https://en.wikipedia.org/wiki/Climate
- https://en.wikipedia.org/wiki/Climate_change
- https://en.wikipedia.org/wiki/Global_warming
- https://en.wikipedia.org/wiki/History_of_Earth
- https://cdiac.ess-dive.lbl.gov/trends/co2/ice_core_co2.html
- http://www.planetforlife.com/gwarm/glob1000.html
- https://www.visitcalifornia.com/destination/spotlight-death-valley-national-park
- https://en.wikipedia.org/wiki/Sahara

VIII. PERSONAL AND SOCIAL DEVELOPMENT

A. SELF – KNOWLEDGE AND SOCIAL SKILLS

Self- knowledge is one of the principles of social psychology. It is a term used to describe how a person conceptualizes oneself. Thus, it is closely related to self-concept.

It is important not to confuse self-knowledge with self-awareness as the second one is more related to the character, motives, feelings, and desires while the first is a knowledge that contains not only beliefs, personality traits, values but also physical characteristics and the knowledge that we exist as individuals.[25]

In order to reach our cognitive-self, self-awareness and self-consciousness are required, which are two different paths from where you can have access to the complex term called self-knowledge.

The significance of having the cognition of our self is fundamental as every single human action and behaviour is based on the self. If we don't sense our personal identity, then how do we expect to nurture our social personality and social skills?

Social identity undoubtedly plays a vital role in people's everyday life. Our behaviour, body language, gestures and our communication in general (verbal or non-verbal) appears in early age and continues to follow our lives forever. We form interpersonal relationships based on our social skills, which are linked to self-knowledge.

This matter has been an issue for research in order to understand how interpersonal interaction functions and why some people are better at social interactions than others. It is also suggested that social skills can be taught or learnt by experiences and practice, a fact that is encouraging as it allows people to facilitate communication and interaction.

Social media helps people come together, communicate and interact in a fast and easy way. We have the chance to have a conversation with people around the world and get

[25] https://opentextbc.ca/socialpsychology/chapter/the-cognitive-self-the-self-concept/

to know new cultures as well as talk to friends and family even when it is not a matter of distance.

But despite communication and messaging there are also different reasons and aspects in the use of social media. They create a new visual world, where users create profiles, present themselves exactly how they want, giving access to the information they want and connect to other users. This leads to the formation of a new identity of each one of us.

"On the Internet, nobody knows you're a dog."

Picture 60: Anonymity on internet

The content we expose ourselves to in the media changes the way we think about ourselves and others. Young people are highly affected by the values embraced by the media.[26] It is a common fact that this digital identity doesn't completely match with our real one. Social media users often create an avatar and that is when the matter of authenticity emerges.

At this point, the concept of authenticity almost becomes an obsession for many social media users. It is important to clarify that authenticity or authentic identity and digital identity are not a permanent or static situation. On the contrary, they both are a dynamic, on-going process.

Digital identity includes displaying ethical and appropriate attitude while using electronic environments and receiving information about using electronic environments. When it

[26] https://sites.psu.edu/aspsy/2018/03/16/how-the-internet-effects-personal-identity/

comes to creation and acquisition of digital identity, digital identities are certifications of users in one respect. They confirm and allow the recipient to certify that an email was really sent by you.

Like identity cards used in daily life, a digital identity is also used to introduce oneself to others. Moreover, social media enables identity expression, exploration and experimentation.

DANGERS THAT MAY OCCUR:

a) Stranger-danger. Due to the anonymity of the world of internet there is always a danger of being deceived by someone.
b) Over-sharing information and revealing too many personal details about your life, may lead to unwanted results.
c) What you post follows you forever- you should never forget that.
d) Cyber bullying

Even those of you with the best intentions, eager to keep your avatars as “authentic” as possible, can’t always present the full spectrum of who you are in any given context- people are too complex and dynamic for that.

SELF-AWARENESS, THE KEY TO SUCCESS

What does having self-awareness mean? It is considered as a factor influencing self-concept and a mechanism to monitor our inner world. That is having an overall introspection of your personality and it focuses on *how* we notice ourselves and not only on *what* we notice (as self-knowledge does).

More specifically, self-awareness is how an individual consciously knows and understands their own character, feelings, motives, and desires.[27]

[27] https://en.wikipedia.org/wiki/Self-awareness

However, youngsters usually tend to perceive themselves in a completely different way, which means there is often a difference between their self-concept and their self-awareness. As a result, they end up consuming their time by getting involved in negative relationships, qualities and behaviours.

So, in that case self-awareness gives the capacity to learn a lesson from mistakes as well as successes; in other words, it shows the road to personal growth.

By achieving self-awareness, someone will be able to succeed in personal and social life, because he or she can set proper goals, interact with others, control emotions and create healthy boundaries. When you have a better understanding of yourself, you are able to take risks, make changes in your life, be more confident and notice in which areas you need to be improved.

HOW TECHNOLOGY AFFECTS YOUR SOCIAL SKILLS

It is a common fact that nowadays teenagers tend to immerse themselves in their technology devices, ignoring the world around them. We are all familiar with the sight of children and teenagers spending their spare time in front of computers, laptops, tablets and smartphones. In a digital world, the majority of communication is accomplished through a keyboard or touch screen and kids no longer understand the basics of simple conversation. Social media can connect us but at the same time isolate us.

As social media connects us within the digital realm, it is creating a social skill deficit in our kids.[28] Research shows that face-to-face communication is the type of interaction that positively affects our brain function, shape, size and helps us modify who we are and how we are.

Side effects of the problem:

- The loss of eye contact
- Losing the ability to speak on the phone

[28] http://libertyclassicalacademy.org/technology-affects-social-skills/

- Spatial awareness and dangerous distraction
- Attention span

While there are lots of disadvantages of the technology used, there are two sides in every coin. Thanks to technology we save time, money and gain knowledge, communication and help. The truth is that while some would argue social skills are dwindling among the youth as we delve further and further into technology, in some capacity they are increasing.[29]

Therefore, the solution is the wise use of technology. This is a matter of great importance, because only this way can technology be a friend rather than an enemy.

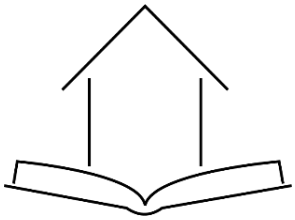
Tips for wise use of social media:

- Try to eliminate the use of technology while eating, studying or doing other things.
- Switch off all the electronic devices at least one hour before bed and one hour after waking up.

Take some days off during the week.

[29] https://www.theodysseyonline.com/why-technology-isnt-ruining-our-generation

HOMEWORK SOLUTIONS

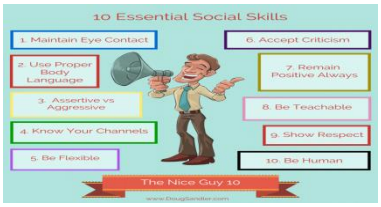


1. Teacher will help students to fill out the following worksheet to build the awareness of personal **strengths**, **weaknesses** and how do you prefer to **ask for help**:
    - I am strong at those fields:
    - I struggle with:
    - My favourite thing about school is:
    - The most stressful thing during my school day is:
    - I'd like some help with:
    - I feel comfortable asking for help in the following ways:

2. Separate into four groups and then discuss and write down solutions about a daily problem you may face. Then share your ideas with the other groups and result in a common decision.

   Each presentation of the team should last around 10 minutes. During the discussion make sure you answer the question, take turns talking, stay on topic, look towards the speaker, make at least one comment and ask at least one question.

ELECTRONIC VERSION

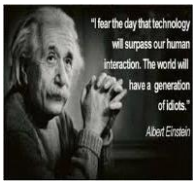
SLIDES	NOTES
PERSONAL AND SOCIAL DEVELOPMENT  A. Self-knowledge and social skills	
Self-knowledge • What am I like? • Descripting our inner world	
Social skills	
Self-awareness, the key to success *"I think self-awareness is probably the most important thing towards being a champion."* Billie Jean King	

How technology affects your social skills

How technology affects your social skills

- Technology can affect life both positively and negatively.
- It is the new radical way of thinking and doing common things completely differently.
- But there are many dangers hidden in the use of technology as well.

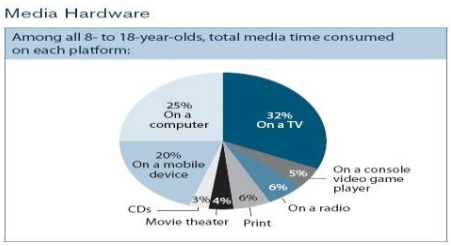
Side effects of the problem

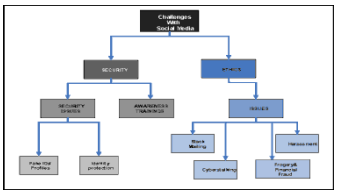


- Can you name two positive and two negative effects of the use of technology?
- Do you think the negative effects can be improved?

Schools and our personal responsibility

- So, what is the solution and who is responsible for it?

Let's talk about statistics The prevalence rates of technology among school children continues to climb: • Over 90% of teens use the Internet (Wong-Lo &Bullock, 2011). • Over 80% of teens use a cell phone regularly (Bullying Statistics, 2009). • Teens between the ages of 13-17 average 1,742 text messages each month (Gurian, n.d.). • 50% of teens feel they are addicted to their mobile devices (CNN, Common sense media).	
Media time consumed on technology devices  	
Social media and identity 	
Social media and identity Let's watch the following to gain an insight of the subject https://bit.ly/2UaEIki	

Challenges with Social media 	
Digital Identity vs Authenticity *"We now live two lives. There's the real us, the person in a kitchen or a bar, who speaks like a human with trusted friends, and then there's what I call our avatar. Our avatar looks and sounds like us, but it's not really us. It's the persona we adopt in any sort of public sphere, which now includes your followers on Twitter and Instagram, and thousands of friends on Facebook. And bad things go viral, so everyone fears any misstep".* Bill Maher,"New Rules" section of Real Time	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. **Self-knowledge is:**
    a) **a term used to describe how a person conceptualizes oneself**
    b) a term used to describe how other people conceptualize us
    c) a term used to show that we know our origins, which made us what we are
    d) a term used to as a synonym to self-admiration

2. **Self-knowledge is a term closely related to:**
    a) self-admiration
    b) self-confidence
    c) self-esteem
    d) **self-concept**

3. **In order to reach cognitive-self:**
    a) self-belief is needed
    b) self-assurance is needed
    c) **self-awareness and self-consciousness are needed**
    d) personal judgment is needed

4. **Self-awareness is considered to be:**
    a) a factor that makes a person narcissist
    b) **a factor influencing self-concept and monitoring our inner world**
    c) an egoistic attitude
    d) a synonym to self-knowledge

5. **Self-awareness:**
    a) has nothing to do with social skills
    b) is only the idea of myself, so it doesn't affect the others
    c) **plays a vital role in our interpersonal relationships**
    d) is an unnecessary personal idea

6. **Technology affects social skills because:**
    a) **We spend our spare time in front of computers, laptops, tablets and smartphones instead of hanging out with friends in personal**
    b) We tend to mimic behaviours that emoticons suggest
    c) If not anybody owns an electronic device or doesn't use the internet it is impossible to communicate
    d) Users don't look up how to be social

7. **Social media**
    a) Can only connect us
    b) Can only isolate us
    c) **Both connects us as well as isolate us**
    d) None of the above

8. **Research shows that face-to-face communication**
    a) Is linked to high rates of violence
    b) **Affects positively our brain function and modifies who we are**
    c) Is more harmful because you get affected of other people's energy
    d) Is exactly the same with communication via technology

9. **Technology use in the school**
    a) Is unnecessary as it makes no difference
    b) Is harmful and needs to be banned
    c) **Is a very useful tool**
    d) Is a perfect thing and books have to be replaced

10. **School's responsibility is**
    a) **To promote responsible and ethical digital users**
    b) To replace old-fashioned material with technology
    c) School has no responsibility concerning the technology use
    d) To ban technology use to students

TRUE – OR – FALSE SENTENCES

1. Self-knowledge is one of psychology's principles. **TRUE**
2. We form interpersonal relationships based on our social skills, which are linked to self-knowledge. **TRUE**
3. The significance of having the cognition of our self has nothing to do with a human's actions. **FALSE**
4. Some of the advantages of social skills are valuable relationships and increased happiness. **TRUE**
5. There isn't a difference between self-concept and self-awareness. **FALSE**
6. In a digital world, the majority of communication is accomplished through a keyboard or touch screen and kids no longer understand the basics of simple conversation. **TRUE**
7. Social media can connect us but at the same time isolate us. **TRUE**
8. Research shows that face-to-face communication is the type of interaction that negatively affects our brain function, shape, size and doesn't help us modify who we are and how we are. **FALSE**
9. Technology has only harmed our social skills and made us aggressive to others. **FALSE**
10. School's responsibility is to promote wise use of technology. **TRUE**

OPEN – END QUESTIONS

1. What is self-knowledge? *(Self- knowledge is one of the principles of social psychology. It is a term used to describe how a person conceptualizes oneself. Thus, it is closely related to self-concept.)*
2. What are the slight differences between self-knowledge and self-awareness? *(Self-knowledge is a knowledge that contains not only beliefs, personality traits, values but also physical characteristics and the knowledge that we exist as individuals, while self-awareness is more related to the character, motives, feelings, desires.)*
3. What are the pros of developing social skills? *(quality communications; valuable relationships; improved efficiency; increased happiness)*
4. How can we cultivate self-awareness? *(Expanding your emotional vocabulary will help you to express yourself better. Question your beliefs. Be aware of your own thoughts and feelings. Asking for constructive feedback from people you trust.)*
5. Which are the signs that you have achieved self-awareness? *(Define your strengths and weaknesses. I can identify what I need to fulfil a new task. Point your mistakes and be able to correct them. Understand and talk about your feelings. Have an empathetic attitude about other people's needs and feelings. Notice how my behaviour affects others.)*

OPEN – END SENTENCES

1. In order to reach our cognitive-self … *(self-awareness and self-consciousness)* are required, which are two different paths from where you can have access to the complex term called self-knowledge.
2. The significance of having the cognition of our self is fundamental as every single human action and behaviour is based … *(on the self).*
3. Self-awareness is considered as a factor influencing … *(self-concept).*
4. Self-awareness gives the capacity to learn a lesson from … *(mistakes and successes).*

5. By achieving self-awareness, someone will be able to succeed in … *(personal and social life).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what self-awareness is.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Is it crucial that the children understand how to reach a cognitive self, how to notice themselves and to cultivate their self-awareness?
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be:

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide.: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**SELF-KNOWLEDGE AND SOCIAL SKILLS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realize: • what is self-knowledge; • the significance of social skills; • what having self-awareness means; • how they can enrich their self-awareness; • the importance of being self-aware.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• Psychology • Sociology

PART II: Description of the lesson

Activity one: Warm up

Procedure: The children will be asked to give their own perspective from the quotations posted:

- "Sweat plus sacrifice equals success" Charles O. Finley
- "Quality does not come by accident. It is a product of intention" Charles Luckman

Interaction: T-Ss, Ss –T, Ss - Ss

Time to be allocated: 10 min.

Activity two: PowerPoint presentation

Procedure: After discussing the quotes above, the teacher explains the theory from the textbook and at the same time he shows the slides of the PowerPoint presentation. This way while teaching students will have to pay attention to visual material as well and won't be distracted.

Interaction: T-Ss

Time to be allocated: 20 min.

Activity three: How can you cultivate your self -awareness?

Procedure: At first, for five minutes, the teacher will ask the children to write down what basic characteristics they have and how did they notice that they have them. Then, ask the children to write down some short term goals and keep track of their process during the next couple of months. Then create a common calendar with goals about the classroom for the year and pin it on the notice board.

Interaction: T-Ss, Ss –Ss

Time to be allocated: 10 min.

Activity four: Summary of the module, discussion of a possible homework procedure

Procedure: Teacher summarizes the main points of the module. You can optionally suggest the unit homework for later.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brainstorming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

- https://en.wikipedia.org/wiki/Self-knowledge_(psychology HYPERLINK "https://en.wikipedia.org/wiki/Self-knowledge_(psychology)")
- https://en.wikipedia.org/wiki/Self-awareness
- https://opentextbc.ca/socialpsychology/chapter/the-social-self-the-role-of-the-social-situation/
- https://opentextbc.ca/socialpsychology/chapter/the-cognitive-self-the-self-concept/
- https://opentextbc.ca/socialpsychology/part/chapter-4/
- https://pdfs.semanticscholar.org/a864/fbfd34426c98b2832a3c2aa9fbc7df8bb910.pdf
- https://www.sciencedirect.com/science/article/pii/S0010027715000256
- https://en.wikipedia.org/wiki/Social_skills
- https://positivepsychologyprogram.com/self-concept/?fbclid=IwAR2Ig1dNRlneu6zjGVph0ueveW6-wl5SPszEwWwR39ophdnwECTqZV-q6XA#worksheets-self-concept
- https://www.skillsyouneed.com/ips/social-skills.html

B. UNDERSTANDING NEEDS AND INTERESTS

WHAT IS TEACHING FOR UNDERSTANDING?

Despite the fact that knowledge and skills absorb plenty of concern and are getting plenty of attention in today's educational system, they do not guarantee understanding. It is commonly noticed that people keep gaining knowledge through their lifetime without understanding deeply the base of it and how to use it properly. But, without those skills, knowledge is almost useless! In the long term, education must aim for active use of knowledge and skill. In short, we must teach for understanding in order to realize the long-term payoffs of education.

What does it mean to understand a topic? Build up performances of understanding around it. The true point of learning for understanding should be an actual engagement in those performances. The learners must spend the larger part of their time with activities that ask them to generalize, find new examples, carry out applications, and work through other understanding performances. And they must do so in a thoughtful way, with appropriate feedback to help them perform better.

In summary, typical classrooms do not give a sufficient presence to thoughtful engagement in understanding performances. To get the understanding we want, we need to put understanding up front. And that means putting thoughtful engagement in performances of understanding up front!

HOW CAN WE TEACH FOR UNDERSTANDING?

- **Make learning a long-term, thinking-centred process.** The interest of the learning procedure should be centred on the thought of ideas they are learning for an extended period of time, so that they can learn their way around the topic.

- **Provide for a rich ongoing assessment.** The offer of criteria, feedback and opportunities for reflection is essential in order to learn performances of understanding well. Traditionally, assessment comes at the end of a topic and

focuses on grading and accountability. These are important functions that need to be honoured in many contexts. But they do not serve students' immediate learning needs very well. To learn effectively, students need criteria, feedback, and opportunities for reflection from the beginning of any sequence of instruction (cf. Baron, 1990; Gifford and O'Connor, 1991; Perrone, 1991b).

- **Support learning with powerful representations.** The way that information is presented can influence enormously how well that information supports understanding performances.

- **Pay attention to developmental factors.** The learning process should be adjusted to what students can or cannot learn depending on their age and developmental factors in general.

- **Introduce students into the discipline.**

- **Teach for transfer.**

Helping students to make the connections they otherwise might not make, and helping them to cultivate mental habits of connection-making (Brown, 1989; Perkins and Salomon, 1988; Salomon and Perkins, 1989).

THE IMPORTANCE OF EMPATHY

What is empathy? It is the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner.

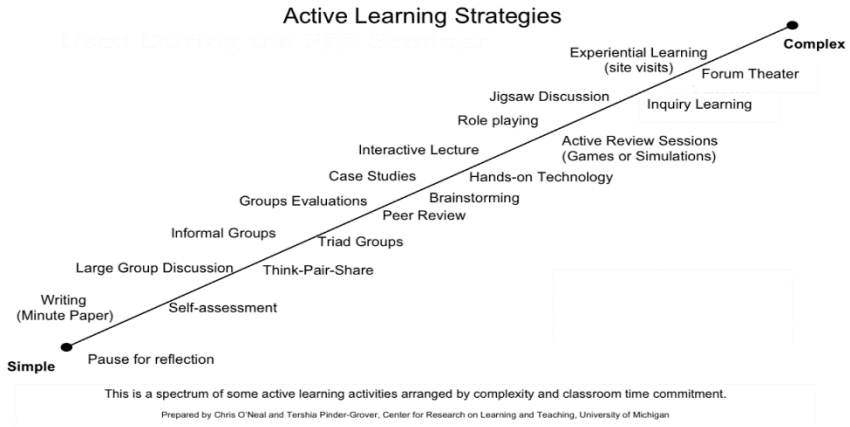
Sympathy and *empathy* are closely related words, sharing common origins and similar circumstances in which each applicable. However, they are not synonymous. To start with, ***sympathy*****,** it may refer to sharing or having the capacity to share the feelings of

another person, while ***empathy*** tends to be used to mean imagining or having the capacity to imagine, feeling that someone actually has.

WHAT IS ACTIVE LEARNING?

Active learning is any approach to instruction in which all students are asked to engage in the learning process. Active learning opposes traditional methods in which students were passive recipients of knowledge from an expert.

Active learning can take many forms and be executed in any discipline. Commonly, students engage in small or large activities centred on writing, talking, and problem solving or reflecting.



Picture 61: Active learning strategies

Why use it?

Active learning improves student's outcomes. The benefits to using such activities are plenty, including improved critical thinking skills, increased retention and transfer of new information, increased motivation, improved interpersonal skills, and decreased course failure (Prince, 2004).

As one example, the National Survey of Student Engagement (NSSE) has examined the engagement experiences of hundreds of thousands of students from over 1600 colleges

and universities since 2000. The consistent results of these data show that hands-on, integrative, and collaborative active learning experiences lead to high levels of student achievement and personal development (Kuh, O'Donnell, and Schneider, 2017).

Finally, research reveals a mutual influence between active learning and emotional states. Active learning can positively affect student motivation (Owens, Sadler, Barlow, & Smith-Walters, 2017) in turn, the overall impact of motivation moderates key learning characteristics such as attention and memory consolidation (Cavenagh, 2016).

Now let's try an activity altogether

Rotating chair group discussions: Rotating chair group discussions encourage students to actively listen to selected speakers who follow a pattern of guiding class discussion and summarizing previous points. Students lead and stimulate class discussion as they "rotate" roles, repeatedly selecting the following speaker.

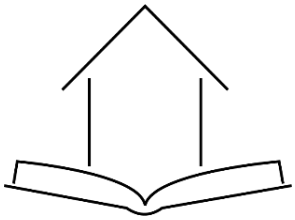
To use this strategy effectively, ensure that students adhere to the following pattern:

- When a student wishes to participate, they must raise their hand.
- The student who is speaking calls on the next speaker**,** ideally someone who has not yet contributed.
- The student who has been called upon briefly summarizes what the previous student said before developing the idea further.

This process can be repeated across a variety of topics, with your guidance to stay on track and help stuck students. The benefits of rotating chair group discussions are not only limited to the speakers. Knowing that they may be called upon to summarize the previous topic, all students are engaged in attentive listening, frequently jotting down notes and ideas to stay on track in the spaces between speaking.

Moreover, students are put into a scenario where they learn from their colleagues' ideas, sparking new considerations of material in an active and engaging way.

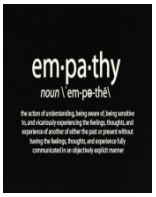
HOMEWORK SOLUTIONS



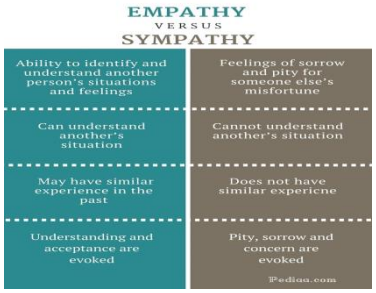
1. The teacher will help students to choose a topic from the subject of science and try to connect it with as many subjects as they can.

2. The teacher will guide students to write down one of their favourite activities. Then select all the purposes in a box. Choose each time one paper and discuss in the classroom about the possible motives that lead them to choose this activity. (Students will notice that every person related to their personality acts differently).

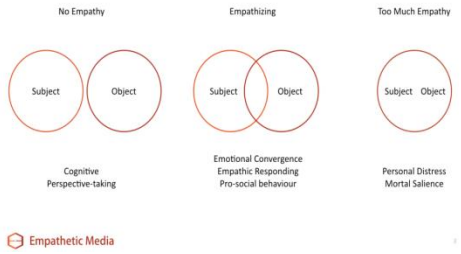
ELECTRONIC VERSION

SLIDES	NOTES
The importance of empathy 	
What is empathy?  "Empathy"was coined in 1909 by Edward B. Titchener. The word's spelling borrows from an ancient Greek word, empαtheia ("passion"). Titchener used empathy for the purpose of translating a German word and its concept of shared feeling(*Wiktionary)*	
What is sympathy? The word "sympathy „comes from the ancient Greek sun pathos, meaning "with/together" and "suffering." The word was modified in Late Latin to sympathy and then in Middle French to sympathies (*Wiktionary)*	

What's the difference between sympathy and empathy?

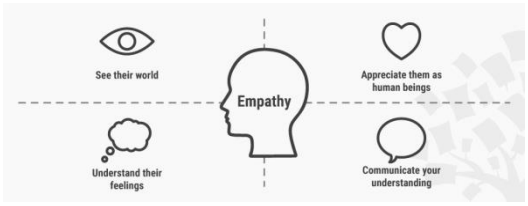


Types of empathy

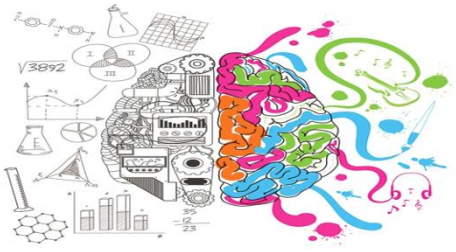
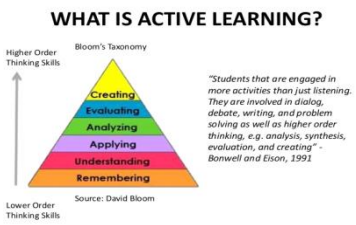


Why is empathy important?

How to develop empathetic skills



- Be observant of others
- Use active listening
- Open up

Active Learning 	
What is active learning? • Active learning happens when students are given time to work with the topic by interacting, games, activity, drawing, making maps. • Students are no longer mere receivers of information, but they work and understand to generate knowledge. • The role of the teacher shifts to being a facilitator.	
What is active learning? 	
Examples of active learning • Think-Pair-Share • Collaborative learning groups • Student-led review sessions • Games • Analysis or reactions to videos • Student debates • Mini-research proposals or projects • Student generated exam questions • Keeping journals or logs	

Why is active learning important? • Reduces conflict and stress • Accelerates staff development • Promotes strategic thinking • Prevents problems save time • Increases capacity for innovation	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What is teaching for understanding:

a) **It is a framework that teachers can use for making learning process more efficient**

b) It is a method students can use from making learning process more efficient

c) It is a learning activity application used in schools with innovative teaching curriculum

d) None of the above

2. Teaching for understanding is better that traditional methods because

a) It is teacher-oriented

b) It focuses on how well the teacher perform in class

c) It results in better grades

d) **It focuses on students and make the learning procedure more efficient**

3. **Why is teaching for understanding important**
    a) Because it aims to better grades
    b) Because it teaches to students how to listen
    c) **Because it provides students with in-depth understanding**
    d) Because students do not interrupt the teacher

4. **Which are some of the characteristics of teaching for understanding?**
    a) **Learning activities, ongoing assessment, games**
    b) Quiet classroom with little speaking
    c) Usual tests for the improvement of students grades
    d) Frequent meetings with parents to inform them properly

5. **Learning for understanding is a method that**
    a) Makes students more shy due to self-explosion
    b) **Makes learning a long-term, thinking-centred process**
    c) Improves teacher-student relationship
    d) Makes learning a more demanding process

6. **Education must aim for active use of**
    a) knowledge
    b) skills
    c) **knowledge and skills**
    d) learning by heart

7. **Teachers must teach for understanding in order to realize**
    a) the reason why they are getting their salaries
    b) **long-term payoffs of education**
    c) short-term payoffs of education
    d) how their students can get a proper job

8. **To learn effectively, students also need**
    a) **feedback**
    b) competition
    c) most homework
    d) no homework

9. **Teachers can teach for understanding by**
    a) creating a competitive environment
    b) supporting those who understand quickly and have potential
    c) **paying attention to developmental factors**
    d) constant revision of students' mistakes

10. **Teaching and learning processes are**
    a) **linked**
    b) opposites
    c) synonyms
    d) none of the above

TRUE – OR – FALSE SENTENCES

1. People keep gaining knowledge through their lifetime without in-depth understanding and how to use it properly. **TRUE**
2. Not every educational system guarantees understanding and skills, just strict knowledge. **TRUE**
3. The learners must spend the larger part of their time trying to learn a lesson by heart than learning activities. **FALSE**
4. Feedback and opportunities for reflection isn't essential in order to learn performances of understanding well. **FALSE**
5. The learning process should be adjusted to what students can or cannot learn depending on their age and developmental factors in general. **TRUE**
6. Comprehension can only be achieved with discipline and concentration. **TRUE**
7. It is commonly noticed that people keep gaining knowledge through their lifetime only with in-depth understanding. **FALSE**
8. Education must aim for active use of knowledge and skills. **TRUE**
9. Teachers must teach for understanding in order to realize the long-term payoffs of education. **TRUE**
10. The true point of learning for understanding should be a passive engagement in those performances. **FALSE**

OPEN – END QUESTIONS

1. What is empathy? *(The action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner; also, the capacity of this.)*
2. What is sympathy? *(The action of understanding other people's feelings by being less or not at all emotionally involved.)*
3. What's the difference between sympathy and empathy? *(In terms of empathy you are able to experience whatever the other person feels, so the level of understanding becomes more personal. On the other hand, when feeling sympathy, you are less or not at all emotionally involved as you understand the other people's suffering and you console or reassure them.)*
4. What are the types of empathy? *(Cognitive empathy, Emotional empathy, Compassionate empathy.)*
5. Why is empathy important? *(It is crucial that we attempt to experience other people's realities and for that we need empathy. Trying to understand leads to empathy and empathy leads to growth. It's the key to creating and maintaining our interpersonal relationships.)*

OPEN – END SENTENCES

1. In the long term, education must aim for active use of … (*knowledge*).
2. In order to realize the long-term payoffs of education we must … (*teach for understanding*).
3. The learners must spend the larger part of their time with … (*activities*).
4. The way that information is presented can influence enormously how well that information supports … (*understanding performances*).
5. The learning process should be adjusted to what students can or cannot learn depending on … (*their age and developmental factors).*

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what specific needs and interests in the digital era there are.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion of empathy is vital in general terms also: it makes pupils understand that they must be active and accept others.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be:

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide.: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A.**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**UNDERSTANDING NEEDS AND INTERESTS**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realize: • define the difference between learning and learning for understanding; • the importance of it; • the basic steps in order to achieve it.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• Education • Psychology • Social Studies • ICT • Arts

PART II: Description of the lesson

Activity one: What does it mean to understand something?

Procedure: Teaching for Understanding describes a new approach to traditional teaching that requires students to think, analyse, solve problems and think deeper of what they learn. Discuss topics such as:

- **Why to educate for understanding?**
- **What is understanding?**
- **What should be tough for understanding?**

- **What is generative knowledge?**

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity two: Planning a unit lesson

Procedure: Now that you have practiced identifying elements of the Teaching for Understanding framework, complete a graphic organizer based on a unit and lesson of your own. Using the Planning a Unit and Lesson form, follow these steps:

- Choose a social studies unit that you teach.
- Identify the yearlong goal or through line your unit will relate to.
- Come up with a generative topic that provides the specific focus of this unit.
- List the unit goals that support the generative topic and one or more of the through lines.
- Show the performances of understanding that you will require of students in each lesson of the unit.
- Show the ongoing assessment activity that you will include in each lesson.
- Describe the culminating assessment that you will plan for the end of the unit.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 15 min.

Activity three: What did you learn?

Procedure: In this session, you learned how the Teaching for Understanding framework can be used to develop and connect social studies units. Review your initial concept chart, answers to the reading questions, and the unit you developed. Now write a summary of what you've learned. Be sure to include:

- What you learned about the factors that influence your curriculum planning;
- How you might incorporate each element of the Teaching for Understanding framework into your practice;
- The benefits and challenges of using the framework in your teaching; and

- How students' understanding can improve over the course of the year.

Interaction: T-Ss, Ss –T

Time to be allocated: 15 min.

Activity four: Summary of the module, discussion of a possible homework procedure

Procedure: Teacher summarizes the main points of the module. Upon the upon decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brain storming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

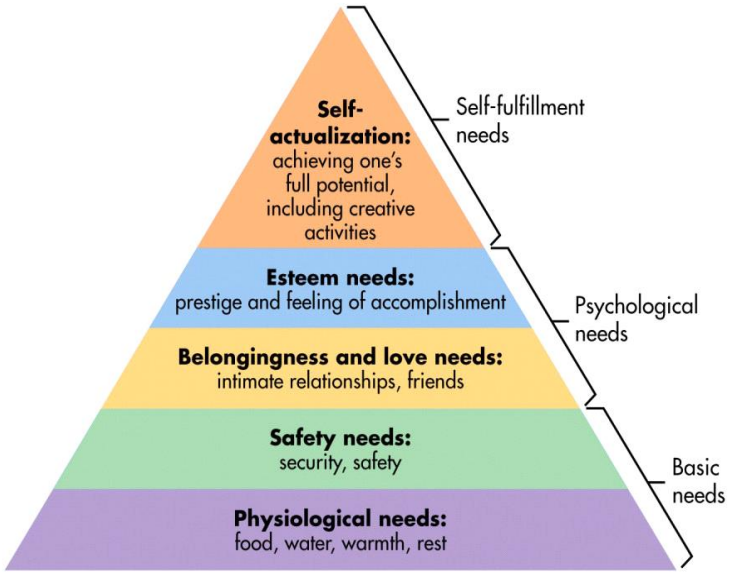
- https://www.gse.harvard.edu/news/uk/08/05/what-teaching-understanding
- https://www.learner.org/workshops/socialstudies/pdf/session2/2.TeachingForUnderstanding.pdf
- Bereiter, C. and Scardamalia, M. (1985). Cognitive coping strategies and the problem of inert knowledge. In S.S. Chipman, J.W. Segal, and R. Glaser (Eds.), Thinking and learning skills, Vol. 2: Current research and open questions (pp. 65-80). Hillsdale, N.J.: Erlbaum.
- Case, R. (1992). The mind's staircase: Exploring the conceptual underpinnings of children's thought and knowledge. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Gardner, H. (1991). The unschooled mind: How children think and how schools should teach. New York: Basic Books.
- Inhelder, B., and Piaget, J. (1958). The growth of logical thinking from childhood to adolescence. New York: Basic Books.
- https://www.diffen.com/difference/Empathy_vs_Sympathy
- https://en.wiktionary.org/wiki/empathy
- https://en.wiktionary.org/wiki/sympathy
- https://www.youtube.com/watch?v=UzPMMSKfKZQ
- https://www.merriam-webster.com/dictionary/empathy

C. DIFFERENTIATE MOTIVATION FROM MANIPULATION

WHAT IS MOTIVATION?

Motivation is the word derived from the word *'motive'* which means needs, desires, wants or drives within the individuals. It is the process of stimulating people to actions to accomplish the goals.[30]

Human behaviour is goal-directed. Motivation causes goal-directed behaviour. It is through motivation that needs can be handled and tackled purposely. This can be understood by understanding the hierarchy of needs by the manager. The needs of an individual serve as a driving force in human behaviour. Therefore, a manager must understand the "hierarchy of needs". **Maslow proposed "The Need Hierarchy Model"** in 1932 including five different levels of needs.



Picture 62: Maslow´s hierarchy of needs

[30] https://slideplayer.com/slide/8535353/

Types of motivation:

- **Intrinsic motivation:** When the decision of doing something is because you are interested in it and enjoy doing it. Your reasons are internal, they come from within you and you are not driven by other people or by an end result or outcome.
- **Extrinsic motivation:** When the decision of doing something is because you are told you have to do it by someone else. Your reasons are external, such as needing to achieve a goal, wanting to get a reward, or seeking to avoid a disadvantage.

Picture 63: Types of motivation

The importance of motivation:

Motivation is important both for students and teachers. Motivated teachers inspire students to focus. And students motivated for learning inspire teachers to teach. Motivation is important to manage time effectively. In addition, it is important to manage daily life challenges, opportunities and time efficiently to keep moving forward and achieving goals. So, motivation helps us become productive and beneficial. Motivation plays a significant role in human life as well as in human development. There are many obstacles in a human's daily life. Some of these obstacles are the aftermath of natural disasters and some others are created by uneducated society and less practical government policies and law. But when we provide a motivational environment to ourselves, our sense of purpose gets activated.

WHAT IS MANIPULATION?

Manipulation is the skillful handling, controlling or using of something or someone. Manipulation is getting what you want by ignoring or harming the desires of others. Manipulators use charm, persuasion, coaxing, trickery, and misdirection.

Picture 64: Manipulation

It is little wonder that many people do not realize manipulation or recognize manipulators. Psychological manipulation, for instance, is considered as social influence which is not necessarily negative. But it is important to bear in mind that when an influence or influencer aims to change someone's perception in an unduly coercive way, without respecting the right of the influenced to refuse, then it is not harmless.

9 regular traits of manipulative people:

- Manipulative people lack the capacity to approach other people, as a result they create certain scenarios, or they believe that their way of handling a situation is the only way because it means that their needs are being met, and that's all that matters. In other words, they tend to ignore what other people think or feel.
- Manipulative people do not have boundaries. Their needs are a priority for them even though sometimes they hurt other people.
- A manipulator tries to avoid responsibilities and doesn’t mind even if he doesn’t hesitate to blame others. It is just that their ethics doesn’t stop them from refusing responsibility for their actions. Ultimately, they may try to get you to take responsibility for satisfying their needs, leaving no room for fulfilling yours.
- Manipulative people prey on our sensibilities, emotional sensitivity, and especially conscientiousness. They sometimes compliment you for your goodness and

kindness. But over time, praise of these qualities will be minimized because you are being used in the service of someone who really doesn't care about you. They just want to make the most of you and serve their needs.

- A great sign is the way they talk about you when you are not in front. They are masters at "triangulation"—creating scenarios and dynamics that allow for intrigue, rivalry, and jealousy, and encourage and promote disharmony.
- Never waste your time trying to explain who you are to people who are committed to misunderstanding you.
- Try to focus on what people do rather than what they say. Always remember that what a person says and does are two very separate things. Observe someone closely, without making excuses for them—usually what you see is what you get.
- Stay focused on your beliefs. In that way it's not easy for someone to manipulate your thinking.

Manipulation differs a lot from motivation in many points:

Manipulation	Motivation
Cares about the work.	Cares about the work and the person.
Fuelled by pride.	Fuelled with love.
Grounded in style.	Grounded by substance.
Controls people.	Empowers people.
Devalues people.	Values people.
Evil leadership.	Great leadership.
Fosters resentment.	Fosters loyalty.

HOW CAN SOMEONE RECOGNIZE THAT HAS BEEN MANIPULATED?

Favourite weapons of manipulators are: guilt, complaining, comparing, lying, denying ,feigning ignorance, or innocence, blame, bribery, undermining, mind games, assumptions, “foot-in-the-door,” reversals, emotional blackmail, evasiveness, forgetting, fake concern, sympathy, apologies, flattery, and gifts and favours.

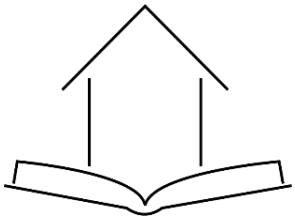
A common technique of the manipulators is to use guilt, deny their promises, agreements, or conversations, or start an argument and blame you for something you didn’t do to get sympathy and power. Manipulators often voice assumptions about your intentions or beliefs and then react to them as if they were true in order to justify their feelings or actions.

They also try to frighten you, so you sacrifice your needs and wants. If that doesn’t work, they sometimes suddenly switch to a lighter mood. They let you believe that they are going to do what you want but in the end they end up doing their thing. Their passive-aggressive behaviour is a form of passive manipulation motivated by fear more than hostility. In every way they avoid confrontation, they’re evasive, change the topic, or use blame and denial, to avoid being wrong. When confronted, co-dependents have difficulty accepting responsibility because of their deep shame. Instead, they deny responsibility, and blame or make excuses or make empty apologies to keep the peace.

How to handle manipulators?

- Know your fundamental human rights.
- Keep your distance.
- Avoid personalization or safe blame.
- Put the focus on them by asking probing questions.
- Use time to your advantage-think before you answer.
- Know how to say “no”.
- Set consequences when they don’t accept your “no”.

HOMEWORK SOLUTIONS

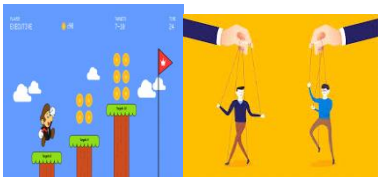


1. This scenario aims to help students analyse a realistic dialog between a mother and child. There are many possible answers, comments will vary so the teacher will not have only one correct answer. She should guide the students for some good remarks like the following: The child at first announces that he has two things to tell his mum. First comes the good news and then he reveals his accident. He chose this order to make his mother react less angrily considering his success. Also, when James describes the incident with the car he tries not to blame himself at all.

ELECTRONIC VERSION

SLIDES	NOTES
DIFFERENTIATE MOTIVATION AND MANIPULATION 	
What is motivation? • Willingness of action especially in behaviour. • The action of motivating. Something which motivates. • An incentive or reason for doing something. (*Wiktionary)*	
Maslow's hierarchy of needs Read from the Textbook about the importance of motivation and discuss it based on Maslow's Hierarchy Needs Pyramid.	
Types of motivation 	

Ways to boost motivation • Achievement and completion • Acknowledgement and recognition • Helping others • Being creative • Quality direction • Clear goals • Attention and being liked • Challenges	
Why is motivation important? 	
What is manipulation 	
What is manipulation • To treat or operate with or as if with the hands or by mechanical means especially in a skilful manner. • To manage or utilize skilfully. To control or play upon by artful, unfair, or insidious means especially to one's own advantage. • To change by artful or unfair means so as to serve one's purpose (*Definitions by Merriam-Webster)*	

Types of manipulation • Relationship manipulation • Psychological manipulation • Religious manipulation • Business manipulation • Mental manipulation	
Quotes for manipulation 	
Traits of manipulative people • Does any manipulative person come to your mind • What are some basic traits you notice on that person?	
Basic differences between motivation and manipulation 	

Motivation vs manipulation

Motivating:	Manipulating:
"Pep talk" using positive adjectives Example: "You should do it, let the world see how good you are!"	"Pep talk" using your insecurities Example: "You should do it, you are wasting your time otherwise"
"Yes you can attitude" Example: "You can do whatever you set your mind on"	"You don't or you didn't attitude" Example: "You never do what you said you will"
Support through positivity Example: "I believe in you"	"Support" through anger/negativity Example: "I think you are lazy"
Encouraging you to be a better version of yourself Example: "Don't beat yourself up if you cannot do it today, plan"	Encouraging you to be like the other person Example: "I know you are free. Do it today, do it now!"

How to recognize manipulators?

Common tactics of manipulators

- Bullying and threats
- Pleading, begging and repeating something until you wear down
- Guilt tripping
- Empty promises
- Lying, either by omission or commission
- Personal attacks, criticism

(*Leslie Vernick.com)*

How to handle manipulators

What do you think are the ways to protect ourselves from being manipulated by others?

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need the teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. Motivation and manipulation differ in

a) don't differ at all
b) their metaphorical meaning
c) only in their etymology
d) **in many points especially concerning their motives**

2. Manipulation is

a) a better act than motivation
b) **a worse act than motivation**
c) a good act depending on the circumstances
d) a similar act to motivation

3. **Motivation is**
    a) fuelled by pride and with love
    b) fuelled by pride
    c) **fuelled with love**
    d) none of the above

4. **You can handle manipulators by**
    a) **knowing your fundamental rights**
    b) making them friends of yours
    c) going with their flow
    d) letting them get what they want

5. **Manipulators try to frighten you so that you**
    a) **sacrifice your needs**
    b) will get used to it
    c) deal with fright
    d) frighten them back

6. **When you keep your distance**
    a) **you can handle manipulators**
    b) you can avoid meeting them
    c) you become alone
    d) is the only way to be safe

7. **Use time for your advantage**
    a) to handle your own strategy
    b) because time makes everything go away
    c) **to think before you answer**
    d) to always be in a hurry

8. **To handle manipulators you can put the focus on them**
    a) by not talking
    b) by telling bad things for them
    c) by starting a conflict
    d) **by asking probing questions**

9. **Motivation leads to**
    a) **great leadership**
    b) evil leadership
    c) underestimation for ourselves
    d) overvalue for ourselves

10. **"You can do whatever you set your mind on" is an example of**
    a) toxic behaviour
    b) lying to make others like you
    c) **motivation**
    d) manipulation

TRUE – OR – FALSE SENTENCES

1. Manipulation differs a lot from motivation in many ways. **TRUE**
2. Motivation cares about the work and the person. **TRUE**
3. Motivation devalues people. **FALSE**
4. A common technique of the manipulators is to use guilt. **TRUE**
5. Motivation aims at evil leadership. **FALSE**
6. A "yes you can" attitude is manipulation. **FALSE**
7. "I think you are lazy" is an example of support through negativity. **TRUE**
8. **"**I know you are free. Do it today" is an example of motivation. **FALSE**
9. Criticism is a common tactic for a manipulator. **TRUE**
10. Support through positivity is a way manipulators use to make you believe them. **FALSE**

OPEN – END QUESTIONS

1. Name some differences between manipulation and motivation. *(Manipulation cares about the work while motivation cares about the work and the person. Manipulation fosters resentment while motivation fosters loyalty. Manipulation controls people while motivation empowers people.)*
2. Which are three ways to handle manipulators? *(Know your fundamental human rights. Keep your distance. Avoid personalization or safe blame.)*
3. Which are three common tactics of manipulators? (*Lying. Empty promises. Criticism*)
4. Which are three common behaviour acts that motivators do? *(Support through positivity. Help you be the best version of yourself. "Yes, you can" attitude.)*
5. Who can be a manipulator or motivator for someone? (A parent; A friend; A teacher)

OPEN – END SENTENCES

1. Manipulation differs a lot from motivation in … (*many points).*
2. Cares about the work and the person: … (*Motivation*).
3. Evil leadership relates to … (*manipulation*).
4. Empowers and values people: … (*Motivation*).
5. Manipulators often voice assumptions about your intentions or beliefs and then react to them as if they … (*were true*).

METHODOLOGY REMARKS

1. The main target of this module is for the pupils to understand what the difference between motivation and manipulation is.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. Understanding of the notion „manipulation is vital in general terms also: it makes pupils understand that they must be active and accept others.
4. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the module.
5. Teachers are encouraged to use non-standard, innovative methods in teaching the present module. Upon the choice of the teachers, such methods may be: Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each.

Specific remarks for the electronic version

1. Electronic version of the module is in pptx.
2. Slide 2 is meant for short discussions and the summary of the discussion and the right short answer to that slide is on the next slide.: No. 3.
3. Slides follow the written version but do not fully overlap; and therefore, combination of the frontal teaching using the electronic version may become very effective.
4. The electronic version may also contain tailor-made, a simple animation tool too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
5. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the module. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A-**
2. Smartphone tasks may replace homework (i.e., may be used instead of the homework given in the Textbook).
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	6 – 8 (Age group 12 – 14)
Title:	**BASIC DIFFERENCES BETWEEN MOTIVATION AND MANIPULATION.**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realize; • note three main differences between motivation and manipulation and justify your answers. • what defines a manipulative behaviour? • how to protect yourself from being manipulated.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• psychology • sociology
PART II: Description of the lesson	
Activity one: Warm up **Procedure**: Ask the children to write down some main differences between motivation and manipulation. Then all together read from the Textbook the relevant box and discuss the proposals. **Interaction:** T-Ss, Ss –T, Ss-Ss **Time to be allocated**: 10 min.	

Activity two: Create a manipulative profile

Procedure: Based on your experience describe the main traits a manipulative person has. And think about ways that you could avoid being manipulated.

Then read the related part of the Textbook

Interaction: T-Ss, Ss-Ss

Time to be allocated: 20 min.

Activity three: Corners

Procedure: Read Homework 1(Scenario 1). Comment the conversation of the above homework bearing in mind what you have discussed before.

Interaction: T-Ss, Ss –T

Time to be allocated: 10 min.

Activity four: Summary of the module, discussion of a possible homework procedure

Procedure: Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss, Ss –T

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brainstorming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils.

USED AND RECOMMENDED SOURCES

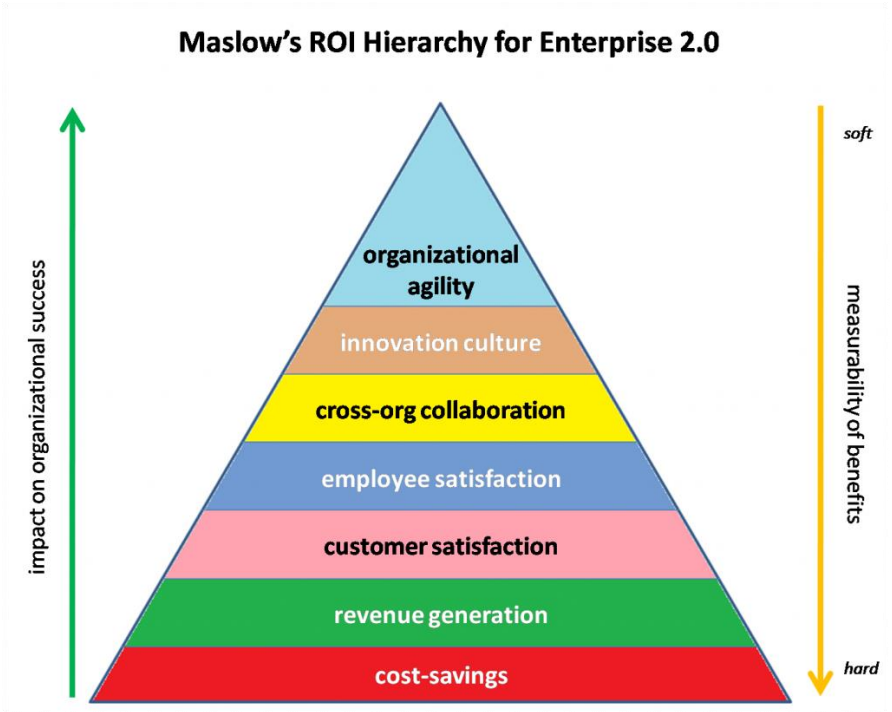
- https://slideplayer.com/slide/8535353/
- https://www.toolshero.com/psychology/theories-of-motivation/hierarchy-of-needs-maslow/
- https://www.hpaconsultant.com/blogs/human-resources/motivation/
- Gibson, F.K. & Teasley, C.E. (1973). The Humanistic Model of Organizational Motivation: A Review of Research Support. Public Administration Review 33, no. 1 (February 1973): 89-96.
- https://www.merriam-webster.com/dictionary/manipulate
- https://dictionary.cambridge.org/dictionary/english/manipulation
- https://en.wikipedia.org/wiki/Psychological_manipulation
- https://www.youtube.com/watch?v=CTf8wTxyigk
- https://leslievernick.com/
- Maslow, A. H. (2013). A theory of human motivation. Start Publishing LLC.
- glassofelephant.com/2018/07/22/lets-talk-motivation-or-manipulation/

IX. APPENDIX 1

CSR (CORPORATE-CITIZENS'-COMMUNITY) SOCIAL RESPONSIBILITY

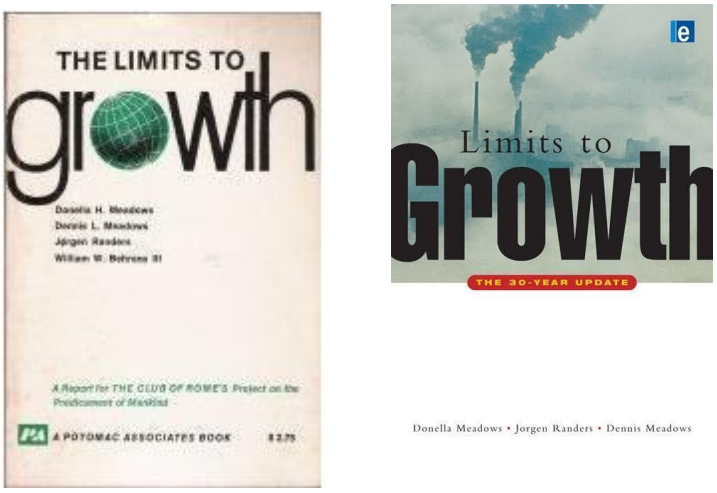
Corporate / Citizens / Community Social Responsibility

In the classical first half of the last century, the main and only task is to make a profit (Milton Friedman said: "Maximising profit is the corporation's only purpose"). Albeit it was debated, that rule reigned for a long time. True, others like the author of the Maslow diagram, formulated other tasks for a corporation also:



Picture 65: Purpose of the corporation (ROI = Return on Investment)

Still, entries like „customer satisfaction” or „employee satisfaction” or „innovation structure” still belong to the „internal” corporate issues. The first impulse to turn „outside”, i.e. to consider that a corporation may have other responsibilities than just profit maximisation; to consider that a corporation does not work in a vacuum but amidst of a smaller or bigger society – i.e., the corporation and the community inevitably interfere, influence each other – came in the time when the ecologists started to worry about the pollution of the environment. It was one of the main issues in the world-famous book of „Limits to Growth” by Donella H. Meadows at all, published in 1972. In their book, the authors analysed global tendencies in energy, in food, in different minerals and materials – and also regarding the pollution of the environment.



Picture 66: The famous „Limits to Growth” and its 30-year update

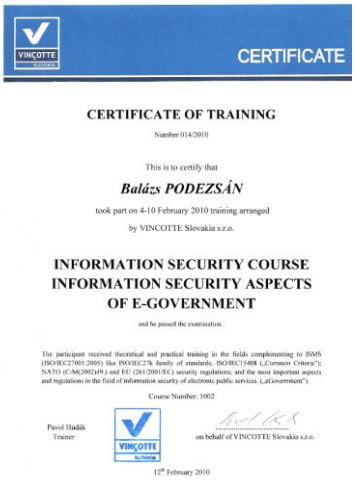
This was one of the most important and influencing books in the second half of the last century in the world and it initiated a look at corporations beyond their physical limits too. Soon, scientists were in agreement that a company (In American English: a corporation) must have other responsibilities beyond the purely economic issues, i.e. profit maximisation. Scientists came to a consensus opinion that in general, a company should have four general responsibilities.

Picture 67: The four responsibilities of a corporation (company)

As is usual in the scientific world, scientists started to define what responsibility might mean and content what. It was agreed upon upfront, that the basic, underlying responsibility is profit maximisation (“economic responsibilities' ') and soon to an agreement regarding the contents of the other three as well. As scientists came to a consensus opinion, practices, contents, approaches and procedures started to be similar all over the world. Uniformisation of the approach and contents mean standardisation and the international organisation for that started its uniformisation activities. ISO (International Standard Organisation) soon proposed an international standard for CSR (Corporate Social Responsibility) and at the end and after long preparatory work, the international standard ISO26000:2010 appeared. When an international standard appears, countries decide if they adapt the given ISO standard. If so, it becomes a national standard as well. ISO26000:2010 (in short: ISO26000) has been adopted in more than 100 countries in the world till now. That means that the vast majority of the world economy units agree now on its principles.

There are a great many international standards. Since the contents are known and adopted from Alaska to New Zealand, all companies know what it means “our company secures quality according to the ISO9000 standard”. To prove that, service companies exist that are entitled (accredited) to audit the company and sign, “yes, they follow the ISO9000 rules”. Accordingly, it is possible to audit a company in accordance with the international standard. Practically all big companies of the world have adopted that standard, i.e. its concept, approach and contents. The compliance of their activities is regularly controlled by auditors; who in turn must regularly train themselves in the new

versions of the chosen international standard. Without regular such training, the auditor loses its authority to do audits.



CERTIFICATE

CERTIFICATE OF TRAINING

Number 014/2010

This is to certify that

Balázs PODEZSÁN

took part on 4-10 February 2010 training arranged

by VINCOTTE Slovakia s.r.o.

INFORMATION SECURITY COURSE
INFORMATION SECURITY ASPECTS
OF E-GOVERNMENT

and he passed the examination .

The participant received theoretical and practical training in the fields complementing to ISMS (ISO/IEC27001:2005) like ISO/IEC27K family of standards, ISO/IEC15408 („Common Criteria"); NATO (C-M(2002)49.) and EU (261/2001/EC) security regulations; and the most important aspects and regulations in the field of information security of electronic public services. („eGovernment").

Course Number: 1002

Pavol Hudák
Trainer

on behalf of VINCOTTE Slovakia s.r.o.

12th February 2010

Picture 68: A certificate about an auditor's training in information security

In the CSR international standard, economic and legal requirements were obvious. Absolutely new are the ethical responsibilities and the philanthropic responsibilities, which clearly turn the attention of the company (corporation) to the outside world: they clearly indicate that "profit at all cost" is not valid for a decent, responsible company since there are other responsibilities also a corporation must meet. So, the famous saying "all is fair in love and war" (and in fight for profit) does not hold.

ETHICS

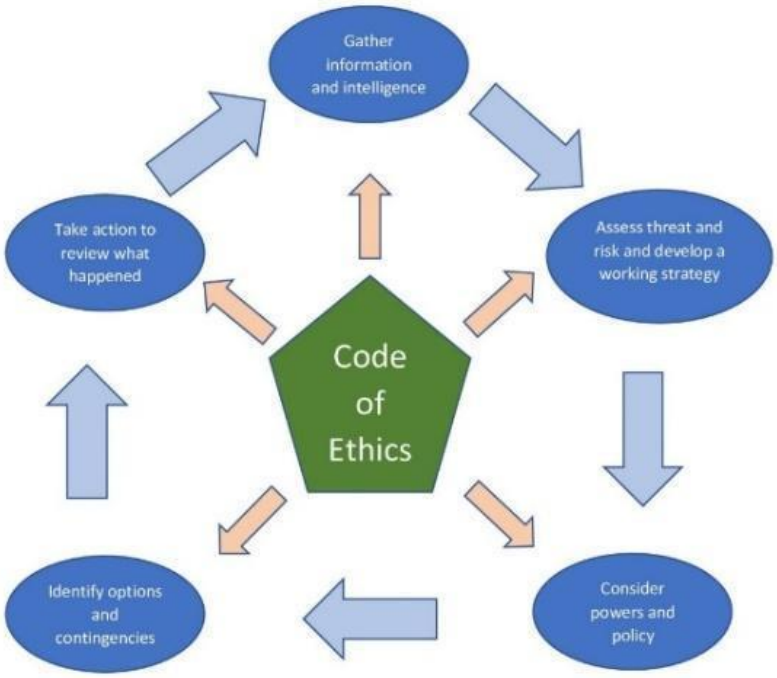
Ethics is an interesting aspect. Ethics seeks to resolve questions of human morality by defining concepts such as good and evil, right and wrong, virtue and vice, justice and crime.[31]

It is true that "human ethics" does exist and it holds for the whole of mankind but in fact, ethical rules are set by the given community. Therefore, it may well be that what is ethical in one community is not ethical in another. (In the cannibals' society, eating humans was a normal ethical action).Since earlier, in the ancient times, in the Hebrew and Greek culture, ethics had a divine origin, so ethics was regarded of higher and overwhelming value than the legal system. (In Sophocle's Antigone, in spite of the king's order (=law),

[31] https://en.wikipedia.org/wiki/Ethics

Antigone buries her brother because “it is the ethical order of Gods” – even if she was sentenced to death for her action.)

There is no law for ethics, but a code of ethics exists in many communities.



Picture 69: Code of ethics

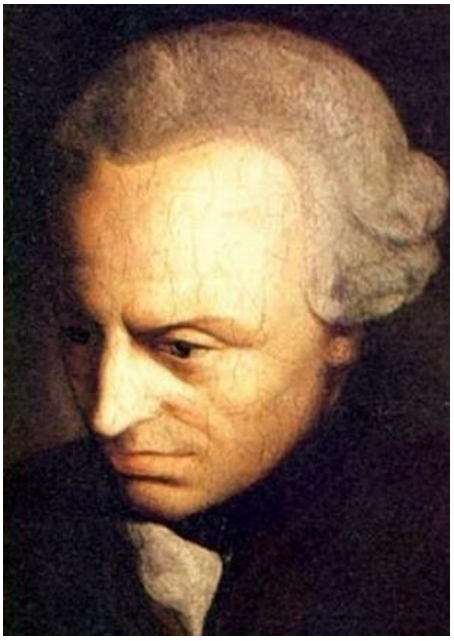
CODE OF ETHICS

In most of the cases, there is no written rule for ethics. It is “felt”, it is “understood” but no rules are written. (Sometimes, books called “Code of conduct in the society” do appear on the shelves of bookstores. They are different from the ethics but still quite a lot of things are referred to there also.) Since there is no law regulating the ethics, ethical behaviour cannot be enforced. The only force is the opinion of the society – but sometimes it is a stronger force than law, especially in smaller societies.

The overwhelming power of ethics over a legal system was discussed by many philosophers. Notably, Immanuel Cant, the famous German philosopher (1724-1804) called the ethical rules as “categorical imperative” – i.e. an ethical order which is stronger than anything else.

Ethical aspect holds for all CSR: for Citizens’, for Corporate and also for Community Social Responsibility. Here also, ethical rules are not enforceable and in some opinion,

that is the reason why they are stronger. (They say ethical rules, honesty and the community opinion are the enforcing forces).



Picture 70: Immanuel Kant

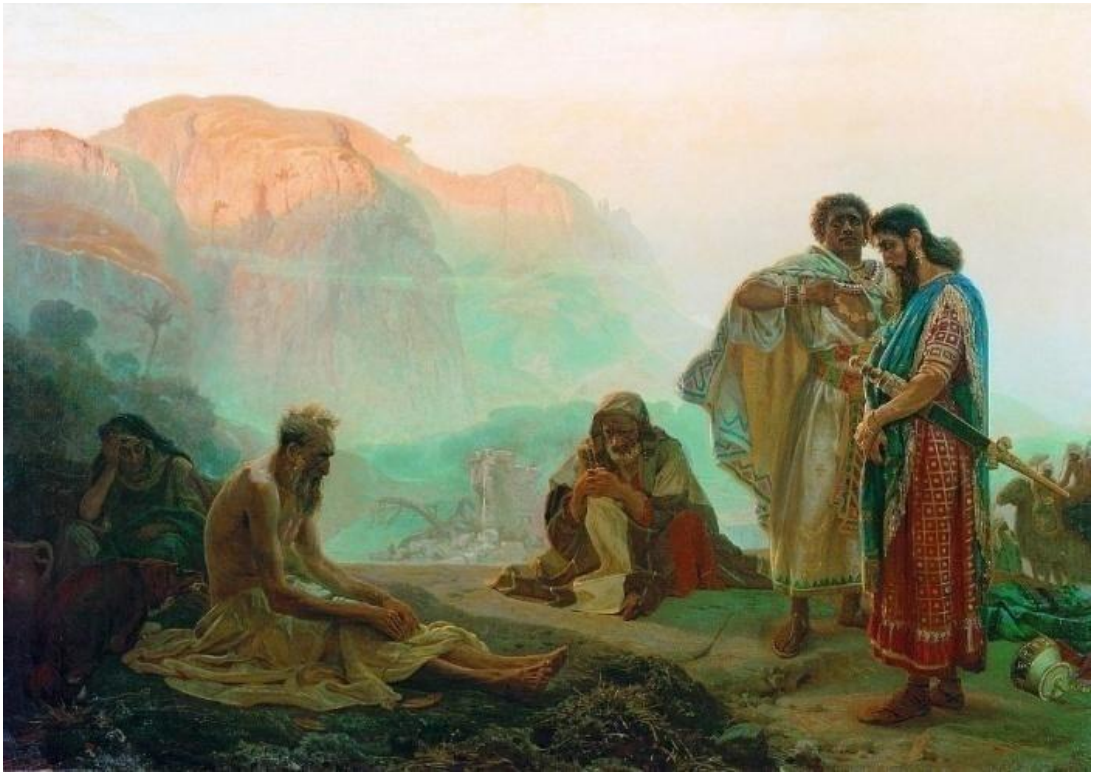
Ethics is usually built as follows:

1. The citizen/Corporate/Community fixes its **values;**
2. Based on the value, **principles** are set;
3. Based on the principles, **practice** follows them.

I.e., the sequence: **ETHICAL VALUES > ETHICAL PRINCIPLES > ETHICAL PRACTICE**

It is important to note that **it is possible to learn ethics but impossible to teach.** "Teach" is possible by example only; children learn what is ethical by simply watching how the family and bigger community behave. Therefore, some kids think it is "ethical" (it is normal) to curse while other kids do not even understand what the other kid says. One of the greatest books about ethics is the Bible; notably also the Old Testament. It also underlines that ethics is given by God and therefore, it is superior to the law. A very special issue of ethics is the so-called "theodicea", i.e., the "morality, the rightfulness of God": if God is good, from whom are the problems in the world…?! One of the greatest of all boots

in the Old Testament about ethics (and theodicea) is the “Book of Job” (Hiob). We read there that there are two “orders” in the world: physical order and ethical order and while physical order is “in order”, the ethical order is far-far behind. It claims that mankind has almost unlimited opportunities regarding science and technology but the ethical reality is far behind. As if the Book of Job is about or days, about the Digital Era… Since the Internet’s virtual world, virtual reality makes people “anonymous”, it makes ethics and morals also much looser. (We can “chat” with others even naked or while eating, which we would never do in reality.) So, one of the dangers Digital Era puts is getting ethics and moral looser.



Picture 71: Ilya Repin: Job and his friends

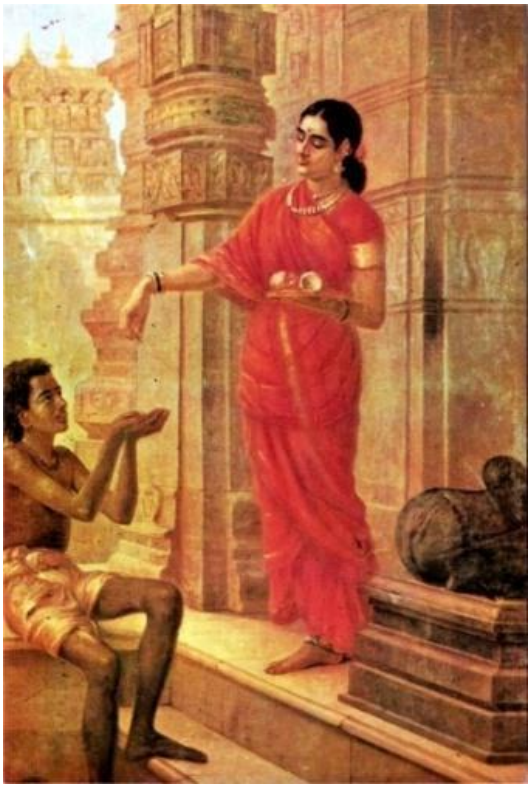
PHILANTHROPY

Philanthropy means the love of humanity. A conventional modern definition is "private initiatives, for the public good, focusing on quality of life", which combines an original humanistic tradition with a social scientific aspect developed in the 20th century. The definition also serves to contrast philanthropy with business endeavours, which are private initiatives for private good, e.g., focusing on material gain, and with government

endeavours, which are public initiatives for public good, e.g., focusing on provision of public services. A person who practices philanthropy is called a philanthropist. Philanthropy has distinguishing characteristics separate from charity; not all charity is philanthropy, or vice versa, though there is a recognized degree of overlap in practice. A difference commonly cited is that charity aims to relieve the pain of a particular social problem, whereas philanthropy attempts to address the root cause of the problem—the difference between the proverbial gift of a fish to a hungry person, versus teaching them how to fish.[32]

CHARITY

The practice of **charity** means the voluntary giving of help to those in need, as a humanitarian act.[33]



Picture 72: A Hindu woman in charity action

[32] https://en.wikipedia.org/wiki/Philanthropy
[33] https://en.wikipedia.org/wiki/Charity

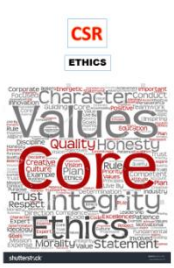
Philanthropy and charity are even more in contradiction with the original “profit at all cost” approach: while ethics does not necessarily decrease profit, philanthropy and charity definitely does. Still, it is a clear sign that the corporation (and also the citizen or the community) realises: they do not live in a vacuum and they have responsibility for the surrounding world. It is important to know: philanthropy or charity is never an obligatory action. He, who can, helps; he, who cannot, does not. No prescriptions, no rules, no expectations, no obligatory actions. Very often the philanthropist or the charitable person/corporation/community follows the Latin saying: “Hodeas mihi, cras tibi”. I.e., what happens to me today may happen to you tomorrow, or vice versa: in what need you are in today, I may fall into similar need tomorrow**.”**

Therefore, CSR is a real sign of ethical and humanitarian responsibility to help those in need. And even if it originated as an action for the corporations; it also goes for the citizens and also for the communities – smaller or bigger.

ELECTRONIC VERSION

SLIDES	NOTES

ERASMUS+ CSR CORPORATE SOCIAL RESPONSIBILITY	
ERASMUS+ CSR CORPORATE/CITIZENS/COMMUNITY'S SOCIAL RESPONSIBILITY CORPORATION COMMUNITY CITIZEN	
ERASMUS+ CSR CORPORATE SOCIAL RESPONSIBILITY	
ERASMUS+ CSR CORPORATE SOCIAL RESPONSIBILITY ETHICS ECONOMY	
ERASMUS+ CSR CORPORATE CITIZENS SOCIAL RESPONSIBILITY COMMUNITY PHILANTHROPY ETHICS LEGAL ECONOMY	

ERASMUS+ CSR ETHICS	
ERASMUS+ CSR ETHICS PRACTICES PRINCIPLES CODE OF CONDUCT VALUES	
ERASMUS+ CSR ETHICS Family Values	
 ERASMUS+ CSR ETHICS Character Values Quality Honesty Core Integrity Trust Respect Ethics	
ERASMUS+ CSR ETHICS WRONG RiGHT	

ERASMUS+ CSR PHYLANTHROPY	
ERASMUS+ CSR PHYLANTHROPY No one has ever become poor by GIVING	
ERASMUS+ CSR PHYLANTHROPY	
ERASMUS+ CSR PHYLANTHROPY DONATION BOX	
ERASMUS+ CSR PHYLANTHROPY DONATION DONATE LOVE	

SMARTPHONE VERSION

INTRODUCTORY REMARKS

1. For the multiple-choice questions, the answer printed in bold is the only correct one. The same goes for TRUE – FALSE sentences: only the marked option is correct. Questions are based on the control questions given in the Textbook.
2. For open-end sentences and questions, other answers formulated differently may also be correct; the teacher will decide if to accept it or not. So, while multiple-choice questions and TRUE – FALSE sentences can be evaluated automatically, open-end tasks need teacher's evaluation.
3. All questions and tasks can be solved on the basis of the Textbook.
4. See instructions regarding Socrative.com in the Appendix.

MULTIPLE CHOICE QUESTIONS

1. What was originally CSR?

a) Chief Regular Surgeon
b) Conceptional Regional Supply
c) **Corporate Social Responsibility**
d) Chad Regular Supplement
e) Chinese Reactor Support

2. What was originally thought to be the only aim of a corporation?

a) Produce bread
b) Provide job for workers
c) Repair airplanes
d) **Produce profit at any cost**
e) Give donations

3. **Why did corporations start to look beyond their own gates?**
    a) because people came through them
    b) **because pollution went beyond the boundaries of the company**
    c) because a flood came in
    d) because a hurricane hit the gates
    e) because cars parked there

4. **What other responsibilities were identified in CSR?**
    a) there were no other responsibilities identified
    b) work safety, nothing more
    c) paying higher salaries to the workers
    d) minimising the profit
    e) **legal, ethical and philanthropic responsibilities**

5. **What is ISO?**
    a) **International Standard Organisation**
    b) Indian Sees Opportunity
    c) International Seafood Origin
    d) Internal Standard Occupation
    e) there is no such acronym as ISO

6. **What are the legal responsibilities of a company?**
    a) to make as much profit as possible
    b) to have many lawyers
    c) **to obey and follow the legal regulations**
    d) to write a lot of books
    e) There are no legal responsibilities for a company

7. **What are the ethical responsibilities of a citizen?**
    a) to work for more money
    b) to work for less money
    c) to work for no money
    d) **to follow ethical rules of the society**
    e) there are no ethical responsibilities for the citizens

8. **What is ethics?**
    a) **rules of good and right behaviour in the society**
    b) rules of the soccer match
    c) rules of aircraft repair
    d) rules to pay the bill in the shop
    e) rules to bake bread

9. **What is philanthropy?**
    a) it is a new branch of anthropology
    b) it is about how to work
    c) it is the rules of basketball
    d) it is the rules of behaviour in the school
    e) **it is voluntary donation and help to those in need**

10. **What is a donation?**
    a) **voluntary help to those in need**
    b) it is the rules between nations
    c) it is how to cook donuts
    d) it is to take money from those who have
    e) it is a rule of thumb

TRUE – OR – FALSE SENTENCES

1. CSR was originally for soccer teams. **FALSE**
2. Corporations never had to produce profit. **FALSE**
3. Influence of a company goes well beyond its boundaries. **TRUE**
4. A company is responsible for more than just producing profit at any cost. **TRUE**
5. CSR was first developed for companies. **TRUE**
6. CSR cannot be extended to citizens. **FALSE**
7. CSR may be understood for communities as well. **TRUE**
8. Ethics is not an issue for companies. **FALSE**
9. Philanthropy may be understood for citizens and societies as well. **TRUE**
10. CSR is not only for companies but for citizens and communities as well. **TRUE**

OPEN – END QUESTIONS

1. What is CSR? *(Originally, Corporate Social Responsibility.)*
2. Is there an international standard for CSR?*(Yes, the ISO26000)*
3. What is ethics? *(Rules in a society about what is regarded right or wrong)*
4. What are superior, ethical or legal rules? *(Ethical)*
5. What is philanthropy? *(voluntary help for those in need)*

OPEN – END SENTENCES

1. Corporations are responsible not only for … *(profit).*
2. Citizens must do everything possible to find a job in order … *(to cover their own expenses plus those of the children).*
3. Donations are necessary because … *(there are people in need).*
4. Donation is possible only if … *(the donator can afford it).*
5. Legal regulations are always written, but ethical ones … *(usually not: it is the expectations of the society).*

METHODOLOGY REMARKS

1. The main target of this Appendix is for the pupils to understand what CSR is.
2. The theme of the module seems rather theoretical; it is important that the teacher always gives concrete examples for the theoretical aspects.
3. The concept of CSR is of general rule of behaviour; not only for companies but also for citizens and communities as well. Pupils should fully understand what ethical responsibility is and why it is in danger in the Digital Era.
4. Understanding of the notion „ethics" and „philanthropy" are general terms also: it is important that pupils understand that they must be active and energetic for those two responsibilities too.
5. Textbook materials and TSM help teachers in classical, frontal teaching. However, frontal teaching may be combined with the use of the electronic version of the Appendix.
6. Teachers are encouraged to use non-standard, innovative methods in teaching the present material. Upon the choice of the teachers, such methods may be:
    a) Small lectures presented by the pupils. Small lectures may be around 5…10 minutes each. The following themes are proposed for the pupil's minilecture: What is CSR? Why is it important? Why CSR may be understood for citizens as well? Give examples of people's actions following CSR. What is ethics? Why is it important in a society? Describe actions and purpose of donations. Explain the use of them.
    b) Debates or brainstorming over some concepts. The following themes are proposed for debates or brainstorming: Why is ethics regarded superior than the law? Is it good or not to be charitable? Does our society follow the CSR rules? How?

If the teacher decides to do brainstorming, pupils should be prepared about the rules and procedure during the brainstorming. For support, look at https://blog.aweber.com/email-marketing/10-rules-for-mind-blowing-content-brainstorming-sessions.htm.

For innovative teaching ideas look at https://www.edsys.in/16-innovative-ideas-make-teaching-methods-effective/

Specific remarks for the electronic version

1. The Electronic version of the Appendix is in pptx.
2. Slides are rather theoretical; the teacher must talk about them and explain what they show. Slides No 11, 13 and 14 may be used for brainstorming.
3. The Electronic version may also contain tailor-made, a simple animation tool prepared by the teacher too, where the sequence timing of the slides is regulated by the teachers. Preparation of the theme-oriented animation slides is the task of the teacher, who also has to choose the proper, simple idea (concept) to be presented.
4. If embarking on ICT-aided teaching, teachers may use the following YouTube presentations too:
    - https://www.youtube.com/watch?v=E0NkGtNU_9w(CSR, 10’57”)
    - https://www.youtube.com/watch?v=MiIv5u59qPs (CSR, 2’29”)
    - https://www.youtube.com/watch?v=xIyDmPNDDSg (CSR and ethics, 4’54”)
    - https://www.youtube.com/watch?v=WcR-V3vdhG8 (CSR in Coca Cola; 3’09”)
    - https://www.youtube.com/watch?v=1WG20YAef6Q (Charity and Mother Teresa; 3’49”)

For use of YouTube materials, a fast internet connection is needed.

Specific remarks for smartphone version

1. There are thirty different tasks (questions, open-end sentences, etc.) They cover the whole material of the Appendix. Evaluation depends on the rules of the given school and teacher of course, but we suggest minimum **25 good answers out of 30 possible is a mark A-**
2. Smartphone tasks may replace homework.
3. SOCRATIVE allows using the given questions as homework, as a competition or as a support for class work. If it is used in the class work, the class plan below must be adjusted accordingly.
4. The teacher is free to create any amount of additional tasks for smartphone use.
5. Other possibilities of SOCRATIVE are described in the Appendix SOCRATIVE.
6. Teachers are encouraged to use the smartphone version extensively. Experience shows that forbidding the use of smartphones in the classroom is simply counterproductive; and if the teacher uses a smartphone, the pupils will follow him/her most enthusiastically.
7. Solutions proposed for the open-end questions and open-end sentences can only be evaluated by the teacher. Suggested solutions are just a sample; good answers may be formulated in other words also.

SAMPLE CLASS PLAN

PART I	
Level/Grade:	12 – 15
Title:	**CSR**
Time:	45 min
Learning objectives:	By the end of the lesson students will be able to realise : • what CSR means; • why it is possible and desirable to extend CSR; • which are the critically important extensions in CSR to economic issues; • what is ethics and what it means also for citizens and communities; • what is philanthropy and why it is important on all levels.
Materials needed:	Textbook, Powerpoint presentation, smart-board, projector
Preparation & Prerequisites:	Teacher will have previously read the Textbook and watched the electronic version (PPT). Small notes for the textbook and electronic version in the TSM will also be very useful.
Subject concentration	• ethics • charity • sociology • politics

PART II: Description of the lesson

Activity one: Warm up

Procedure: Teacher greets the class and inquiries about the Ss' mood;

To prepare the students for topics, teacher asks the question below and gets their opinions:

- **What are corporations for?**
- **What was regarded as the only target for a company?**

- **What is profit?**

Teacher makes sure that students understand what sustainability is and what its characteristics are.

Interaction: T-Ss, Ss –T,

Time to be allocated: 10 min.

Activity two: How CSR emerged?

Procedure: It can be a game. Students write their own samples for companies obtaining profit and what those companies make with it.

Interaction: T-Ss, Ss –T, Ss-Ss

Time to be allocated: 8 min.

Activity three: CSR for companies

Procedure: Students discuss why companies have other responsibilities other than profit making. As a group debate between “for-profiteers” and “not only profiteers”. Teacher speaks about the reasons for the non-sustainability of life we live.

Interaction: T-Ss, Ss-Ss

Time to be allocated: 10 min.

Activity four: CSR for citizens and communities

Procedure: Teacher introduces the question and students speak about it. Discussion points will be: the importance of ethics and philanthropy in general for the individuals (citizens) and in society.

Interaction: T-Ss, Ss-Ss;

Time to be allocated: 12 min.

Activity five: Summary of the module, discussion of a possible homework

Procedure:

Teacher summarizes the main points of the module. Upon the decision of the teacher, he/she may assign students homework.

Interaction: T-Ss

Time to be allocated: 4 min.

Evaluation of class working

Time to be allocated: 1 min.

REMARKS

The presented sample class plan reflects basically the classical, frontal teaching methodology. If non-standard, innovative methodologies are used like brain storming, group debates, student's lectures, the teacher should adjust the class plan to the time allocated to those methodologies. In such a case, the module can be taught not in one class, but two or even three, according to the time demand of the given non-standard methodology and activity of the pupils. Also, the Appendix is an integration of these kinds of CSR: Corporate, Citizens and Community. Upon the decision of the teacher, Appendix materials may be divided into two or three parts discussing the topics on one, two or three classes. If so, new class plans are to be made for each decision.

USED AND RECOMMENDED LITERATURE

- https://iso26000.info/wp-content/uploads/2016/03/GRI-G4_ISO_26000_Linkage_Report_FINAL_28JAN_2014_01.pdf
- https://en.wikipedia.org/wiki/Corporate_social_responsibility
- https://en.wikipedia.org/wiki/Business_ethics
- https://www.investopedia.com/terms/c/corp-social-responsibility.asp
- https://www.investopedia.com/terms/i/international-organization-for-standardization-iso.asp
- https://www.iso.org/iso-26000-social-responsibility.html
- https://www.iso.org/standard/42546.html
- https://www.globalreporting.org/Pages/default.aspx
- https://www.omicsonline.org/open-access/community-engagement-and-social-responsibility-2162-6359.1000201.php?aid=35677
- https://www.theglobeandmail.com/report-on-business/careers/leadership-lab/how-businesses-can-run-a-meaningful-community-engagement-program/article33873764/
- https://en.wikipedia.org/wiki/The_Limits_to_Growth
- https://en.wikipedia.org/wiki/Ethics
- https://en.wikipedia.org/wiki/Antigone
- https://en.wikipedia.org/wiki/Immanuel_Kant
- *https://en.wikipedia.org/wiki/Philanthropy*
- https://en.wikipedia.org/wiki/Charity_(practice)
- https://en.wikipedia.org/wiki/Book_of_Job

X. APPENDIX 2

HOW TO USE SOCRATIVE.COM?

1. Socrative.com is a very effective tool to make an easy teacher-student interface between the computer of the teacher and the smartphone of the student. Smartphones must be preferably iPod or Android.

2. The teacher must make a very simple registration and choose between two options: a smaller/simpler one allowing to work with 50 students simultaneously; that option is free of charge. If the teacher wishes to work with up to 150 students at the same time, he/she will have to invest a small amount (in the order of ca 20 Euros per year). Our program is elaborated for the free option; we think 50 students are enough to handle a minimum of two classes at the same time. Further, if the teacher works in different time intervals with different groups, the number of students available to take part in the exercise may go to several hundreds. (Say, one class has a time window to solve the tasks today, the next class – tomorrow, etc. – that is enough to handle a reasonable number of connections over a week or two.). Time window is defined by the teacher; it is open for the selected group of students (up to 50 of them) till the teacher keeps the given task open on his/her computer. (The task runs on the Socrative surface; the teacher may close his/her computer in the meantime; e.g. during a homework)

3. Socrative.com is an excellent tool for individual learning and checking the knowledge level and also for making home-works and submitting them to the teacher to be evaluated. Apart from that use, it is well usable in the classroom while working with different groups, organising team competitions, etc. Further, it is also an excellent feedback device to check which part of the material is understood to what extent. („Exit control”) and it also allows you to answer questions too.

4. There are different kinds of tasks available:

a) Multiple-choice questions.

Here, there are several answers provided to the question and the student chooses which of the options is right. Socrative evaluates the answer automatically. Questions and answer options are elaborated by the teacher; and one or several of the offered answer options may be right. In SOCIRES, we elaborated questions with one right answer only. Upon wish, the teacher may even add an explanation to the option(s) too. In SOCIRES, we did not give explanations; they are available studying the relevant topics of the Textbook.

Each Module of each Topic is controlled by a 10-question multiple-choice set.

b) True-or-false sentences.

Here, students must decide if the given short expression (sentence) is true or not. The answer is again evaluated automatically.

In SOCIRES, 10 'True-or False' sentences have been elaborated for each Module of each Topic.

c) Open-end sentences

Here, the student must end the sentences so that the sentences are correct. In difference to the options a. and b. above, open-end questions and/or sentences cannot be evaluated automatically; evaluation is done by the teacher. (There may be several, equally correct solutions, where simply the wording is different)

In SOCIRES, we provide here two options: five open-end sentences to be ended and five open-end questions to be answered.

d) “Space race”

It is the combination of a. and/or b. above, but here the speed of the good solution is also important.

In SOCIRES, both multiple-choice questions and/or ’True-or-False’ tasks can be used as Space Race.

e) “Exit ticket”

It helps define which part of the actual material is understood to what extent. However, it may even be used for the evaluation of the teacher’s class work by the students. Questions may be put in written or also orally. Upon wish, even a vote for the classroom materials (and/or for the classroom work of the teacher…!) can be organised.

There are additional options (modification) in each of the above possibilities: for example, the given five options in the ’multiple-choice questions’ (and the questions themselves - may be put at random sequence by the teacher’s computer, allowing thus to use it as a control work in the classroom avoiding copying the answer from the neighbour. Random-order tasks are very useful in the classroom. Additionally, a student (or a students’ team) may or may not get an immediate feedback about the correctness of the chosen option – it thus can be fit to the specific methodology the teacher has chosen for the given particular class work.

A teacher is allowed to elaborate any amount of additional materials. A code is generated to each of such materials and using that code, the teacher may share it with other follow teachers. Similarly, a material can be easily imported by the teacher if he/she wishes so and the author agrees to. In such a way, teachers-members of the Socrative family can have access to immense amounts of tasks elaborated by others and can offer their materials for others to use.

Socrative offers several other options and possibilities. Please consult descriptions and other support materials. There are a number of tutorials on different languages on YouTube; the list of some English tutorials will be given at the end of this description.

1. Upon registration, the teacher will get a registration number. „The class' is understood as those persons the teacher shares his/her code with. In the basic option, the number of those having the code cannot be more than 50 at a time – but within fifty, no limitation exists on the location of his/her 'class members' upon wish, it may be persons from fifty different countries too.

2. Common work starts from the 'Start' sign of the teacher and finishes as the teacher clicks on 'Finish'. The timeframe may be agreed upon preliminarily too, providing opportunity to handle several times 50 'classroom members' also. Combining this possibility with the above options, national and/or international competitions may also be organised easily.

3. The teacher works in the Socrative with his/her computer while the students – with their smartphones. However, nothing prevents the teacher to use his/her smartphone as well – in such cases, the teacher is the 'manager' with his/her computer but also a 'team member' with his/her smartphone too. That dichotomy allows the teacher to construct specific role playing and other methodological tricks too.

4. For the teacher to be able 'to run the show', he/she must simply register only. Similarly, a student can participate in the work if he/she has downloaded 'Socrative' app from his usual app store (e.g. from play.google.com). Having had the app downloaded and having got the teacher's number (a 'classroom number'), a student may try to enter into the classroom. However, entering is possible only, when the teacher has clicked on the 'Start" for a given task.

5. Socrative is an excellent and very effective tool for individual learning. However, it can be used for teamwork too. (Teacher may assign any task to be discussed by a given team and give the answer after the discussion as the team decision)

6. You can find tutorials in English at the following addresses:

- https://www.youtube.com/watch?v=nC-Nhpf0Efw
- https://www.youtube.com/watch?v=WlnI1f-Q1JM
- https://www.youtube.com/watch?v=LPkqFxWHG4M
- https://www.youtube.com/watch?v=OsEUBbm-tKg
- https://www.youtube.com/watch?v=byK8l6WUX3Q
- https://www.youtube.com/watch?v=R-4WCq4RZPs
- https://www.youtube.com/watch?v=bl1BBx15RR0
- https://www.youtube.com/watch?v=6H-IM_SLYPg

XI. APPENDIX 3

ONLINE MULTI ROUND GAME

Since most teachers know how difficult it is at present to engage pupils in teaching with the help of classical materials (textbooks, presentations…), in creating our project we tried to find out which teaching materials currently seem instructive but also fun for pupils. We focused mainly on secondary school students, because it is probably the most challenging here.

Most of the pupils agreed that such an option for them is primarily an online game, in which they can participate either individually or as a group. Although it was not part of the original project, we decided to use the technical skills of some of our students and tried to create a simple game apart from the online practising provided by Socrative. However, we did not want the game to be based only on the correct answers, as is often the case with educational games.

As a result, the game is divided into several levels. The first task is to unlock the individual levels by answering the questions. When students reach a given level, they have a common task to complete (they also can debate about a problem shown) in order to move on. The decision to finish the task is upon the teacher. The game ends when all levels are reached. The game can be tried out at: https://www.digitalerachallenges.eu/

IMAGE LIST

Picture 1: A D/A converter (DAC) 11
Picture 2: A Wolfson Microelectronics-made A/D converter in a circuit 11
Picture 3: 128 GB = 128.000.000.000 bytes 13
Picture 4: Present and expected data storage capacity in the world 14
Picture 5: Information from and about our environment 34
Picture 6: Evaluation effectivity as function of information amount 36
Picture 7: “How to decide…?!” 37
Picture 8: Information flow 38
Picture 9: Communication flow 41
Picture 10: Communication plus metacommunication 42
Picture 11: Mass of information 44
Picture 12: Estimated birth dates of three generations 64
Picture 13: Total knowledge over time 66
Picture 14: Learning efficiency 66
Picture 15: Cooperation 218
Picture 16: Joseph V. Stalin 235
Picture 17: Adolf Hitler 235
Picture 18: Digital era 238
Picture 19: Illustration pyramid 239
Picture 20: Balance between rights and duties 253
Picture 21: Components of the communication process 273
Picture 22: Communication process 274
Picture 23: The petroglyph 291
Picture 24: Working classroom 294
Picture 25: A wish card 312
Picture 26: City of the future 331
Picture 27: Negative impact of digital technologies 334
Picture 28: Negative impact of digital technologies 2 334
Picture 29: Number of people in the world 336
Picture 30: Black Friday 337
Picture 31: Negative impact of digital technologies 4 338
Picture 32: Negative impact of digital technologies 3 338
Picture 33: Moral and ethics 352
Picture 34: If we convert a time in which life exists on Earth to one day (24 hours) a human would show up in the last minute of the day? 369
Picture 35: Power of media 373
Picture 36: Illustration 373
Picture 37: A conspiracy theories 374
Picture 38: Kenya´s activists 375
Picture 39: The Sun 388

Picture 40: Photosynthesis 391
Picture 41: Deforestation 392
Picture 42: The famous “The limits to growth” and its 30-year update 394
Picture 43: The three big systems 415
Picture 44: Circles of sustainability 416
Picture 45: Machines appearing in the textile industry in the 18th century 417
Picture 46: The Black Country 418
Picture 47: Waste 419
Picture 48: Ecological footstep data map, 2007 data 421
Picture 49: Global climate zones 440
Picture 50: Spectrum of solar radiation 441
Picture 51: Carbon dioxide variations 443
Picture 52: CO2 concentration over the years 444
Picture 53: Carbon dioxide in the atmosphere, Mauna Loa Observatory, Hawaii 444
Picture 54: Polar ice cap melting 445
Picture 55: Glacier melting due to global warming 446
Picture 56: Sahara, the biggest hot desert creeping towards Europe 446
Picture 57: Photosynthesis 447
Picture 58: Chloroplasts conducting photosynthesis 447
Picture 59: Solar cells on the roof of a house 449
Picture 60: Anonymity on internet 470
Picture 61: Active learning strategies 493
Picture 62: Maslow´s hierarchy of needs 511
Picture 63: Types of motivation 512
Picture 64: Manipulation 513
Picture 65: Purpose of the corporation (ROI = Return on Investment) 531
Picture 66: The famous „Limits to Growth” and its 30-year update 532
Picture 67: The four responsibilities of a corporation (company) 533
Picture 68: A certificate about an auditor’s training in information security 534
Picture 69: Code of ethics 535
Picture 70: Immanuel Kant 536
Picture 71: Ilya Repin: Job and his friends 537
Picture 72: A Hindu woman in charity action 538

IMAGE SOURCES

- Picture 1: https://www.rohm.com/electronics-basics/ad-da-converters/what-are-ad-da-converters [cited 05.08.2021]
- Picture 2: https://en.wikipedia.org/wiki/Analog-to-digital_converter#/media/File:WM_WM8775SEDS-AB.jpg [cited 05.08.2021]
- Picture 3: https://shopee.com.my/SanDisk-Micro-SD-Card-Ultra-80MB-s-Class-10-Memory-Card-128GB-64GB-32GB-16GB-Micro-SD-SDXC-(SDSQUNS)-i.117939358.4336988554 [cited 05.08.2021]
- Picture 4: https://www.statista.com/statistics/638613/worldwide-data-center-storage-used-capacity/ [cited 05.08.2021]
- Picture 5: https://www.absatzwirtschaft.de/warum-zukunftsfaehigkeit-wichtiger-als-wettbewerbsfaehigkeit-ist-69745/ [cited 05.08.2021]
- Picture 6: The author´s own work
- Picture 7: https://kredico.com/blog.html [cited 05.08.2021]
- Picture 8: The author´s own work
- Picture 9: The author´s own work
- Picture 10: The author´s own work
- Picture 11: https://www.tugraz.at/fileadmin/user_upload/tugrazInternal/News_Stories/Print/research/pdf/research_5_2011.pdf[cited 05.08.2021]
- Picture 12: The author´s own work
- Picture 13: The author´s own work
- Picture 14: The author´s own work
- Picture 15: http://www.spsbazaar.com/BusinessPlan.aspx [cited 05.08.2021]
- Picture 16: https://www.pinterest.es/agnesmalinova/hoy-dibujamos-aa/ [cited 05.08.2021]
- Picture 17: https://us.ivoox.com/en/ultimos-oscuros-dias-hitler-audios-mp3_rf_32362191_1.html [cited 05.08.2021]
- Picture 18: The author´s own work
- Picture 19: The author´s own work
- Picture 20: https://goldenageesgblog.wordpress.com/2014/11/28/citizenship/ [cited 05.08.2021]
- Picture 21: https://www.proprofs.com/quiz-school/story.php?title=communication-for-successful-selling-how-to-build-relationships_2y2 [cited 05.08.2021]
- Picture 22: http://thelearnershandbook.blogspot.com/2015/06/what-i-say-isnt-always-what-you-hear.html [cited 05.08.2021]
- Picture 23: https://scienceviews.com/indian/puercopetroglyphs.html [cited 05.08.2021]

- Picture 24: http://fatemah-alshehri.blogspot.com/2013/ [cited 05.08.2021]
- Picture 25: The author´s own work
- Picture 26: https://www.researchgate.net/profile/Anna-Sircova/publication/321595041_Futurization/links/5a283d9d4585155dd42772e1/Futurization.pdf [cited 05.08.2021]
- Picture 27:https://twitter.com/loesvandelft/status/953716924223033344 [cited 05.08.2021]
- Picture 28: https://www.reddit.com/r/PhonesAreBad/comments/e08hxo/ah_yes_if_you_look_at_your_phone_pikachu_will/ [cited 05.08.2021]
- Picture 29: The author´s own work
- Picture 30: http://www.articulosiete.com/al-momento/nota/item/993-buen-fin-descuentos-espectaculares [cited 05.08.2021]
- Picture 31: https://www.tuxboard.com/la-semaine-sur-twitter-recap-des-meilleurs-tweets-35-couleurs-amours-et-paillettes/ [cited 05.08.2021]
- Picture 32: https://www.clipmass.com/story/126823 [cited 05.08.2021]
- Picture 33: https://pediaa.com/difference-between-ethics-and-morals/ [cited 05.08.2021]
- Picture 34: The author´s own work
- Picture 35:https://twitter.com/fehr_jared [cited 05.08.2021]
- Picture 36: https://www.quora.com/What-are-some-pictures-without-text-with-deep-meaning-s [cited 05.08.2021]
- Picture 37: https://fi.pinterest.com/yarapotter741/cute/ [cited 05.08.2021]
- Picture 38: https://www.google.com/imgres?imgurl=https://tnimage.s3.hicloud.net.tw/photos/shares/AP/20170804/04e3e1094a4645309b4d648dfb34d604.jpg&imgrefurl=https://www.taiwannews.com.tw/en/news/3225743&h=642&w=1024&tbnid=cZ1DC3NBejc64M&tbnh=178&tbnw=284&usg=AI4_-kSQgO1_bxcWGCMZNtMK2bmFcaTmTw&vet=1&docid=2MXdzYhB2vZWvM&itg=1&hl=cs [cited 05.08.2021]
- Picture 39: https://www.npl.washington.edu/chavarri/research [cited 05.08.2021]
- Picture 40: https://brainly.in/question/41131303 [cited 05.08.2021]
- Picture 41: https://twnews.co.uk/gb-news/you-may-have-unknowingly-invested-in-unethical-industries-even-if-most-of-your-choices-are-eco-friendly [cited 05.08.2021]
- Picture 42: https://pluralistic.net/2020/04/06/fill-your-boots/ [cited 05.08.2021]
- Picture 43: https://www.pgsworkshop.com/wp-content/uploads/2018/11/Workshop-Panel-Presentation-Olga.pdf [cited 05.08.2021]

- Picture 44: https://medium.com/@NickLive/permaculture-parenting-912334ab83eb [cited 05.08.2021]
- Picture 45: https://www.mrgrayhistory.com/united-states-history/nationalist-era/sectionalism/ [cited 05.08.2021]
- Picture 46: https://www.pinterest.co.uk/pin/544794886154302816/ [cited 05.08.2021]
- Picture 47: https://thtsearch.com/content/Waste/ [cited 05.08.2021]
- Picture 48: https://www.civico20news.it/mobile/articolo.php?id=21380 [cited 05.08.2021]
- Picture 49: https://www.44north93west.com/climate-schedule-b-day [cited 05.08.2021]
- Picture 50: https://de.m.wikipedia.org/wiki/Datei:Solar_spectrum_en.svg [cited 05.08.2021]
- Picture 51: https://cyclesresearchinstitute.org/climate-cycles-long-term/ [cited 05.08.2021]
- Picture 52: https://planetforlife.com/gwarm/glob1000.html [cited 05.08.2021]
- Picture 53: https://planetforlife.com/gwarm/glob1000.html [cited 05.08.2021]
- Picture 54: https://apnews.com/article/a81b01b87d4c46d1aa8b800ed25d9b18 [cited 05.08.2021]
- Picture 55: https://es.wikipedia.org/wiki/Archivo:Aletschgletsjer_Zwitserland.JPG [cited 05.08.2021]
- Picture 56: https://cutewallpaper.org/21/sahel/view-page-21.html [cited 05.08.2021]
- Picture 57: The author´s own work
- Picture 58: https://blogtanico.com/2021/02/11/botanica-geometrica-o-geometria-botanica/ [cited 05.08.2021]
- Picture 59: https://www.justdial.com/Jodhpur/Suncity-Solar-Pal-Road/0291PX291-X291-210509164326-I8F7_BZDET [cited 05.08.2021]
- Picture 60: http://media.computer.org/pdfs/NGCMay18.pdf [cited 05.08.2021]
- Picture 61: https://www.fabulaapp.com/ [cited 05.08.2021]
- Picture 62: https://www.mdpi.com/2227-7102/11/8/376/htm [cited 05.08.2021]
- Picture 63: The author´s own work
- Picture 64: The author´s own work
- Picture 65: https://www.barbarafrench.net/2010/03/21/mapping-influencers-to-software-purchase-decisions-on-enterprise-20/ [cited 05.08.2021]
- Picture 66: https://www.amazon.co.uk/Limits-Growth-30-year-Update/dp/1844071448 [cited 05.08.2021]
- Picture 67: https://www.researchgate.net/figure/The-pyramid-of-corporate-social-responsibility-Source-Caroll-AB-1991_fig1_269408205[cited 05.08.2021]
- Picture 68: The author´s own work

- Picture 69: https://anjanitania.blogspot.com/2021/08/iem-code-of-ethics-personal-code-of.html [cited 05.08.2021]
- Picture 70: https://www.redjournal.org/article/S0360-3016(17)30737-X/fulltext#relatedArticles [cited 05.08.2021]
- Picture 71: https://www.pinterest.es/pin/219972763024181858/ [cited 05.08.2021]
- Picture 72: https://cz.pinterest.com/pin/114912227977794188/ [cited 05.08.2021]