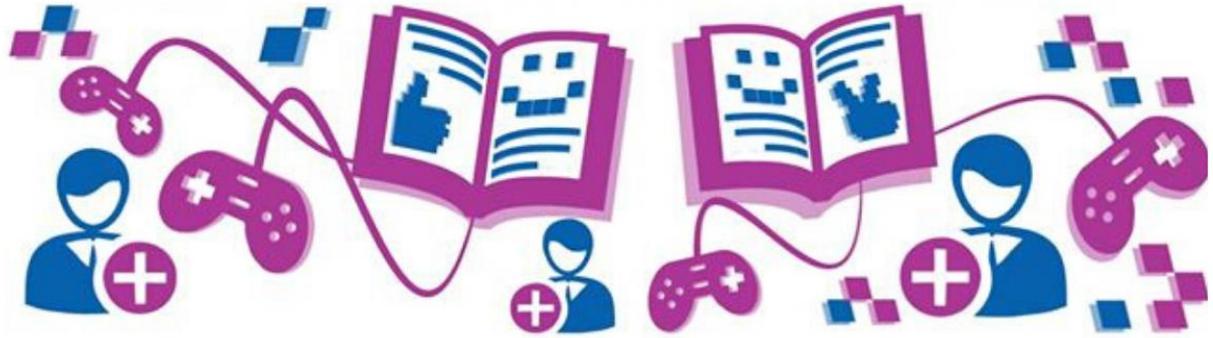


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# GAME ON



GUIDELINES  
AND  
BEST PRACTICES  
ON HOW TO USE  
GAMING  
AS A TOOL IN  
NON-FORMAL EDUCATION



InterCollege



Erasmus+

# Introduction.

This guidebook - is a result of a 10-day-long seminar that was held in Denmark in October 2019. The Seminar was organized by Fora Copenhagen and InterCollege and co-funded by the Erasmus+ programme.

More than 30 young experts were invited to take part in this project. They are experienced youth workers, and also professional video-game players.

The 'Guidelines and Best Practices on How to Use Gaming as a Tool in Non-Formal Education' was created for youth workers by the following editors.

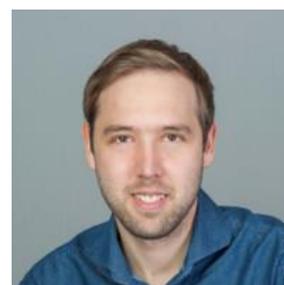
Project coordinator and managing editor of the guidebook:

## **Bertalan Egry**

A project manager who has been working for InterCollege social enterprise in Denmark. Game ON Seminar was the second Erasmus+ project which was co-ordinated and partly facilitated by him. Previously he gained presentation skills when he worked as a television reporter in Hungary.

He still works as a freelance print and video journalist. Bertalan Egry graduated as a Juris Doctor at the faculty of law of Pázmány Péter Catholic University in Budapest and he also has a degree in International Administration (BA) from the same university.

<https://www.linkedin.com/in/bertalan-egry-37389b139/>  
[egryberci@gmail.com](mailto:egryberci@gmail.com).



Lead trainer and managing editor of the guidebook:

## **Aliaksej Burnosenka**

Expert business-trainer and youth-trainer since 1999, certified Coaching specialist, with more than 10 000 training hours fulfilled within 20 years as a trainer and facilitator. He has been awarded two times as Best Youth Trainer of Belarus by the Ministry of Education in 2010 and 2011.

Aliaksej has many years of professional experience as a project-manager and business-consultant. He founded several NGOs, as an educator, he is the best expert in presentation and communication skills, leadership, management, and creativity. Youth-leader and practitioner of "Youth In Action" and "Erasmus+" programs.

<https://www.linkedin.com/in/aburnosenka/>  
[bekar.minsk@gmail.com](mailto:bekar.minsk@gmail.com)



**Editors of the guidebook:**

Adam Hamdan  
Alejandro Sanchis Merino  
Atanas Cholakov  
Azra Brakić  
Benjamin Singer  
Berkan Durak  
Betül İlhan  
Bogdan Tica  
Bulat Serghei  
Carlos Llorens Llorens  
Danka Brumen  
Duca Constanta  
Emil Popescu  
Eva Jurković  
Ion Siscanu  
Ivona Eterović  
Mateja Gabor  
Miguel Conejero Rodríguez  
Nadina Cholakova  
Norberto Pedrini  
Omer Genel  
Onur Genel  
Patricia Gale  
Teslime Cansu Uysal

**With contribution from:**

Amina Mustafe Mohamed  
Ana Vieru  
Asser Mortensen  
Daniel Shillcock  
Emese Laura Laszlo  
Mădălina Botnari  
Soňa Turanová

## **IMPORTANT TO READ BEFORE THE USAGE OF THE GUIDEBOOK**

**Important!** Some of the games might be violent, please use this games with caution and always ensure an appropriate debrief.

Please, also do pay attention to the age recommendation labeled on the game. Some of the games included in this guidebook may not be suitable for children under the age of 18.

### **Disclaimer:**

The following editors have a reservation on using 'Counter-Strike' as a non-formal education tool as in their opinion the game promotes violence.

Azra Brakić  
Bogdan Tica  
Danka Brumen  
Duca Constanta  
Eva Jurković  
Ivona Eterović  
Mateja Gabor  
Patricia Gale  
Teslime Cansu Uysal

The remaining editors are of the opinion that all popular games used by the target group should be included. The remaining editors are of the opinion that proper facilitation and debrief can prevent negative impact on the target group.

# Table of contents

Part One - Which video-games to use?	6
Part Two - How to use the video-games?	7
1. ANNO 2205	7
2. ANNO 2205 <b>Goal:</b> Development of entrepreneurial skills of youngsters;	9
3. Counter-Strike: Global Offensive (CS: GO)	10
4. Geocaching	11
5. Ibb & Obb	12
6. ICED: I Can End Deportation	13
7. Journey	14
8. League of Legends	16
9. Mario Maker 2	17
10. Minecraft	19
11. Pokémon Go!	20
12. SimCity	21
13. The Sims	22
14. World of Warcraft	23
15. Appendix: bullying exercise;	25
16. Appendix: prejudice and stereotypes around gaming (exercise);	26
17. Appendix: Online bullies are bullies in real life;	27
Background	28
General information about the Guideline	28
Interculturality	29
Learning English and other foreign languages	30
Problem management	32
Community	34
Empathy	36
Stress & Anger management	36
Avoiding Negative Effects	39
References	44
Webography	46

## Part One - Which video-games to use?

<b>Video Games</b>	Social Competence	Creativity	Healthy Lifestyle	Strategic Thinking	Entrepreneurship	Participation	Leadership
Anno 2205	✓	✓		✓	✓		✓
Counter-Strike: Global Offensive	✓			✓		✓	✓
Geocaching	✓	✓	✓			✓	✓
Ibb & Obb	✓	✓		✓		✓	✓
ICED: I Can End Deportation	✓	✓		✓		✓	
Journey			✓				✓
League of Legends	✓			✓			
Mario Maker 2		✓	✓	✓			
Minecraft	✓	✓		✓		✓	✓
Planet Zoo		✓	✓	✓	✓		✓
Pokemon GO	✓	✓	✓	✓		✓	✓
SimCity				✓	✓		✓
The Elder Scrolls 3	✓					✓	
The Sims		✓	✓				
World of Warcraft	✓					✓	✓

# Part Two - How to use the video-games?

## 1. ANNO 2205



**Goal:** Development of creativity, leadership, and strategic thinking of youngsters;  
**Number of Participants:** 10-15 (depends on the number of computers available)  
**Age group:** 13-21;  
**Time:** 90 minutes;

**Preparation:** The video-game should be installed on computers and tested against launch fails. Awareness in questions of leadership, creativity, and strategic thinking is recommended to the youth-worker. The questions for the Initial discussion and Reflection phase are prepared in advance.

### Activity:

1. Initiate a discussion where each participant shares his experience with gaming.
2. Participants are welcome to launch the video-game and start playing.
2. Each participant develops the strategy and implements it within the game.
3. Participants have to be very careful about their decisions and try to manage their city as good as possible.



**Reflection:** After playing there will be a debrief session where participants will discuss their strategies and which of their decisions went good and which of them not so good.

Recommended questions are:

- What was the core idea of your strategy and its best side?
- What was the weak side of your strategy?
- How can you reach better results in the game session? How can you improve your strategy?
- How can you use the strategy you developed in this game-session in real life?
- What does it mean for you to be a leader within the lore of this game?
- What is the difference between the leader and the casual person?
- How can you use the leadership skills you obtained in this game, in real life?
- What was your most creative decision during the game-session?
- Which decisions were not creative, but just repetitive or typical?

**Comments:** ANNO 2205 is a game that develops creativity, leadership, and strategic thinking. The idea is to settle your civilization on Moon, build a city or country and manage the production of goods. The happiness of citizens influences their actions and if they are not happy they just leave the city. Through this game, we can clearly highlight and encourage leadership skills among young people



## 2. ANNO 2205

**Goal:** Development of entrepreneurial skills of youngsters;

**Number of Participants:** 10-15 participants (depends on the number of computers available)

**Age group:** 13-21;

**Time:** 30 - 60 minutes;

**Preparation:** The video-game should be installed and launch tested. The questions for the Initial discussion and Reflection phase are prepared in advance. Discussion about entrepreneurship

Proposed questions:

- Do you know what entrepreneurship is?
- Short entrepreneurship definition.
- What does it mean for you?
- What are the good features of an entrepreneur?

**Activity:** Play the game.



**Reflection:** Discussion about their feelings during the game.

Proposed questions:

- How were you feeling during the game?
- What strategy did you use for building your civilization?
- Do you think this game can be used to improve any other skills? (If they don't mention, tell them about creativity and strategic thinking and have a short discussion about it)

### 3. Counter-Strike: Global Offensive (CS: GO)

**Goal:** Development of social and leadership skills of youngsters;

**Number of Participants:** 10;

**Age group:** 16-30 years old;

**Time:** 40 minutes;

**Preparation:** The video-game should be installed and launch tests. The questions for the Initial discussion and Reflection phase are prepared in advance.

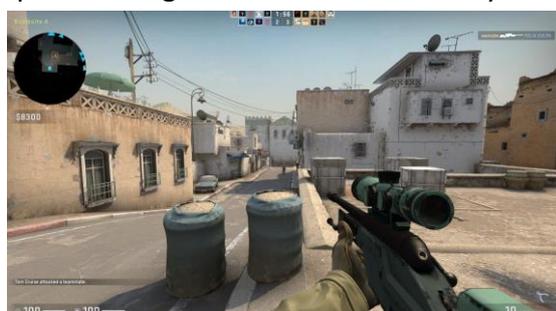
#### **Activity:**

1. Create a discussion with the participants about the positive effect of E-sports, basics of Social skills (communication) and Leadership skills.

2. Participants have to create two groups. They have to choose a name for the team, create a strategy, chose weapons and armor.

3. Participants will play 3 rounds.

4. After playing there will be a debrief session where participants will discuss their strategies, who was the leader of the team, how their skills developed from the first round. Another question might be: "What would they change about the game if you were the developers?"



#### **Comments:**

CS: GO is a video game in which gamers play 5 versus 5, fighting in a virtual close-quarter military operation. Unlike most fast-paced first-person shooter games, where the winner is not determined by quick reflexes, but by whose team is the most strategic and communicative.

## 4. Geocaching

\*workshop for adventurous youngsters

**Goal:** developing navigation and digital skills, teamwork, the creativity of youth, exploring culture and history;

**Number of Participants:** 1 – 100;

**Age group:** 10 + (no upper age limit);

**Time:** 1 hour or more;

**Preparation:** Mobile phone with the Geocaching App installed (1 mobile phone per group is enough);

### **Activities:**

1. Prepare the caches or use the existing ones in the current location by adding some simple group tasks (examples: take a group picture which describes the story of the location, record the video interview in front of the location, find out more info about the location, etc.)
2. Divide people into small teams (recommended up to 5 people) and give them limited time to explore all the caches in a specific area
3. You can also support the competitive spirit with some small award for the best team.

### **Reflection:**

Proposed questions:

- How were you feeling during the game?
- What strategy did you use for building your civilization?
- Do you think this game can be used to improve any other skills? (If they don't mention, tell them about creativity and strategic thinking and have a short discussion about it)

### **Comments:**

Participants navigate to a specific set of GPS coordinates and then attempt to find the geocache (container) hidden at that location.

When we talk about interculturality in the gaming world, geocaching is a game to enjoy nature, explore, learning about your own or other culture and history, and having fun.

## 5. Ibb & Obb

**Goal:** improvement of social competence, teamwork and active listening using video-games;

**Number of participants:** --

**Age group:** 13-30 years old;

**Time:** approximately 45 minutes, depending on the number of participants.

**Place:** Depending on the available resources. We recommend using different rooms and outdoor spaces to ensure good communication between participants.

**Preparation:** It is important for the youth worker to be familiar with the game (the recommended time to play the video game is about 20 min). Before starting the workshop be sure that all participants downloaded the game onto their computers.

### **Activities:**

1. Give your participants a short introduction to the game. Divide them into groups of two and let them start the game.
2. Encourage them to communicate with each other in order to overcome the obstacles.
3. After the time allocated to gaming runs out to make sure all the equipment is stored properly.

*This exercise can be adapted as an outside activity:* You will need blind-folds for one of each team and some large objects. Place objects randomly in the area. Blindfold one of the team members where another one is standing behind him. Using only voice guidance first team member needs to find the object assigned to his group. Ensure a safe place for this game.

**Reflection:** Sit in a circle in a comfortable position. Talk with your group about their experience and about the result. You can use some of the following questions:

- What kind of problems did you face during the playing?
- What kind of methods did you use to try to resolve the problem?
- Did it work? And why?
- What could you do differently?
- How can you connect this game with real-life experiences?
- What did you learn through playing this game?

**Comments:** the activity could be modified according to group size and needs.

## 6. ICED: I Can End Deportation

**Goal: development of** social competence and strategic thinking;

**Number of Participants:** 5;

**Age group:** 13-21;

**Time:** about 1 hour;

### **Preparation:**

Discussion about social competence and strategic thinking.

Proposed questions:

- Do you know what social competence is?
- What does it mean for you?
- What are the good characteristics of social competence?
- Short social competence definition

**Activities:** Play the game. Each player is required to choose one out of 5 different characters in the game.

### **Reflection:**

- Discussion about their feelings during the game
- Discussion about solutions for current immigration policies.

## 7. Journey

**Goal:** After tiring or stressful day at school/university/work this game is very helpful for relaxation and mindfulness. The purpose of this workshop is to teach participants how they can disconnect from the daily stress and obligations using this video game;

**Number of Participants:** 8-12;

**Age group:** 13-30 years old;

**Time:** 60 minutes;

**Preparation:** Read the chapter “Science Behind Stress” (p. 35). In this chapter, you can also read about research that supports the thesis that games can be used as stress relievers. In addition, we encourage you to find literature about mindfulness and its benefits. Also, try playing the game Journey before the workshop so you can show participants how to play.

You need the number of computers depends on the number of people in the group. It is recommended that every person has their own computer. If there are not enough computers, 2 people can share one computer. Make sure you have installed a game Journey to every computer. Prepare enough post-it papers (red and green) and pens for participants to write on it.



### Activities:

1. Introduction (12 minutes). Close your eyes and think about how you feel at this moment (2 minutes). After this, give each participant five green and five red post-it papers. They do not need to use all of the papers. The participants should write the emotions they are feeling on the papers. On the green papers they write all the comfortable emotions they feel (one paper=one emotion) and on the red papers, they write uncomfortable emotions.

After this, they come to the board one by one, stick the post-it to the wall and read what they have written. The green papers are categorized to one side of the board and the green ones to the other one. The purpose is to show which emotions are more common at the moment (10 minutes).

2. Explanation (3 minutes). Participants go to their computer and log into the game. You explain the basis of the game to the participants.

3. Game playing (25 minutes). Participants play the game for 15 minutes. If there are more people than computers, 2 people can share one computer and each player the game for about 12 minutes. It is not recommendable to play the game for less than 10 minutes.



**Reflection:** (20 minutes). Close your eyes again and think about your emotions (2 minutes). Participants should write down new feelings they are feeling on the new post-it papers (green and red). After that participants go to the board again and stick their new papers AND also remove the ones they are not feeling anymore. The purpose is to show them that after playing this video game they are feeling less uncomfortable emotions (8 minutes). Now you can ask them a few questions to encourage a short discussion.

Questions (10 minutes):

- What did you learn in this workshop? (Comment their feelings and stress levels)
- How did you like this workshop?
- Would you use this game at home for relaxation?

## 8. League of Legends

**Goal:** to present young people with the importance of participation and teamwork for achieving their goals.

**Number of Participants:** 10 (there will be 2 teams of 5 players battling each other);

**Age group:** 13-21;

**Time:** 2 hours;

**Preparation:** (30 minutes) - Discussion about leadership and participation.

Proposed questions:

- What does leadership mean for you?
- What are the characteristics of a good leader?
- Are you a team player or you prefer to work alone?
- What is the definition of participation?
- What are the benefits of teamwork, as opposed to working alone?
- Can a team win if it consists of solo-players, that are focused on their own mission, instead of the common goal?

**Activities:** (60 min) The game League of Legends will be played twice, with slightly different instructions.

1. The facilitator instructs the players to focus on having the best possible personal score. All of them should pick attacking roles and try to deal the most damage to other players.
2. Players should have a balanced team and focus on the group score. Some of them should choose roles that are defending and supporting, which means they will not have the best personal score, but they will assist their team in achieving victory. Before this playing, young people should have 10 minutes to discuss who will take which role.

**Reflection:** (30 minutes) Proposed questions:

- How did you feel in the first, and how in the second playing?
- Which one promotes teamwork?
- What are the pros and cons of these tactics?



## 9. Mario Maker 2

**Goal:** to feel different levels of stress and anger and to learn how to control it when playing different difficulties;

**Number of Participants:** 8 - 20;

**Age group:** 13-30 years old;

**Time:** 70 minutes;

**Preparation:** We recommend reading the chapter “Tips and Calming Techniques” (p. 34) before this activity. In this chapter, you can find out how players can calm themselves down when they get angry or stressed while playing video games. You should also learn how to play the game before the activity so you can explain it to the participants.

**Equipment:** The number of computers depends on the number of people in the group. It is recommended that every person has their own computer. Make sure you have installed game Mario Maker 2 to every computer. You will need to be connected to the internet. Print enough papers for the participant with the figure of a person (see Appendix). Ask participants to bring crayons so they can paint the figure in the workshop. Also, print papers with the questions for the Introduction activity.

### Activities:

1. Introduction (12 minutes). Divide participants into groups of 3 members. Ask participants to discuss a situation in life when they felt angry in their group. Give one sheet of paper to every group. On that paper there are questions (8 minutes):

- How did you feel?
- How did you react?
- How long did it take for you to calm down?
- What helped you to calm down?

After they discussed in a group, few people can share their experiences with the whole group (4 minutes).

2. Explanation (8 minutes). Participants go to their computer and log into the game. Present them the game, controls and 3 different levels of difficulty.

3. Gameplay (12). Let participants play the easiest level to get familiar with the controls and rules of the game (8 minutes). After that, they should try to play the most difficult level of the game (4 minutes).

4. Discussion (10 minutes). Participant can discuss their feelings when they were playing games on a different level. Ask them questions:

- Do you want to play more of this game?
- If yes, which level would you like to play again?

The purpose of this part is for participants to notice that different levels of the game can cause different reactions and feelings. They can notice that when the game is too hard, they didn't

even enjoy the game which is important when playing. Probably they were also frustrated when playing the most difficult level.

In the appendix, you can find the figure of a person. You should print it and give one paper with the figure to every participant. Their task is to paint the part of the body where they feel their anger or frustration. They can also choose the color of their feeling. The purpose of this is for them to notice where they feel anger in their bodies.

5. Gameplay 2 (8 minutes). Now they can choose a level that they want to play. They can also choose a medium level that they haven't played yet. The most important about this part is to ENJOY the game.

**Reflection:** (10 minutes). In this part, you put chairs into a circle and discuss with the participants.

Questions:

- What did you feel?
- How did you react?
- How long did it take for you to calm down?
- Was there any method or technique from your life that you could use to calm yourself down in the game?

**Conclusion** (10 minutes). Make a PowerPoint presentation with the different anger management methods from the chapter "Tips and Calming Techniques" (p. 34) and present it to the participant. Ask them if they have any additional questions.



## 10. Minecraft

**Goal:** to improve creativity, problem-solving skills, group work and active listening using video games. The workshop could be modified according to group size and needs;

**Number of Participants:** 13-30 years old;

**Age:** 13-21;

**Time:** minimum 45 minutes, but can vary depending on size group;

**Place:** Depends on available resources \*we recommend to use different rooms and outdoor spaces to ensure good and fluid communication between participants

**Preparation:** It is important for the youth worker to be familiar with the game (recommended time to play a video game is min. 1 hour). Before starting the workshop be sure that all participants downloaded the game in their computers.

**Activities:** Intro: Give your participants a short introduction to the game. Divide them into groups of four (number of groups can vary) and let them start the game. Each participant plays the game separately but for the common goal of the group. During the playing encourage them to equal participation and to communicate with each other in order to achieve a goal. Make sure there is no misusing the game or any kind of bullying. Be a timekeeper and let them know ten, five and one minute before the end. After finishing the game make sure all the equipment is stored properly.

-limited bricks

\*Modified version of this game can be used as an outdoor or indoor activity. In that case, you will need Lego cubes (or any other ones) and enough space for groups. Divide space equally so each group has its own space and give them the same amount of Lego cubes. Task for each group is the same: build the most creative house (or any other object) in -30 degrees. Be a timekeeper and let them know ten, five and one minute before the end. Let them compare the house between themselves.

**Reflection:** Sit in a circle in a comfortable position. Talk with your group about their experience and

result. You can use some of the following questions:

- How did you feel during playing this game?
- Did you work in a team or separately?
- Whose idea was to build it like that?
- What was the hardest part? And easiest?
- What kind of problems did you face during the playing?
- What kind of methods did you use to try to resolve the problem?
- Can you connect this experience with real-life examples?

## 11. Pokémon Go!

**Goal:** promoting a healthy lifestyle, problem-solving skills, and strategic thinking through playing video games. Workshop could be modified recording group size and needs;

**Number of Participants:** Any amount;

**Age Group:** 13-25;

**Time:** min. 1 hour, but can variate depending on size group;

**Place:** Ensure outdoor space safe from any kind of danger;

**Preparation:** it is important for the youth worker to be familiar with the game (recommended time to play min. 20 min), before starting the workshop make sure all participants downloaded the game in their phone and their battery is fully charged;

### Activities:

1. give your participants an intro to the game and get them familiar with the space;
2. Start the game, track time and let them know five and one minute before the end;
3. Finish the game make sure all the equipment is stored properly;

\*Using Pokémon Go game create real-life search for objects:

1. Hide 20 red balls, 12 yellow ones and 4 green ones somewhere in assigned area;
2. Divide participants into groups of five (number of groups can variate);
3. Each group needs to find 5 red, 3 yellow and 1 green ball (there is no enough ball for all groups to finish the task) and inform them that at the end they can exchange balls;
4. During the playing encourage them to equal participation and to communicate with each other in order to achieve a goal (each one needs to take at least one ball);
5. Be a timekeeper and let them know five minutes before the end of a hunt;
6. Give them 5 minutes for discussion;
7. Create "exchange shop" where they can exchange ball following listed rules:
  - 2 red for 1 yellow one
  - 1 yellow for 1 green one
  - 1 green for 2 red ones
  - 2 green and 1 yellow one for 1 blue (blue ball can change any other color)
8. The game is finished when the first group has collected all the necessary balls;

**Reflection:** discuss the experience and the result. Use some of the following questions:

- What kind of problems did you face during the playing?
- What kind of methods did you use to try to resolve the problem?
- Did it work? And why?
- What could you do differently?
- What was the difference or similarities between Pokemon Go and real-life game?
- What did you learn through playing this game?

## 12. SimCity

**Goal:**

**Participants:** 10

**Age Group:**

**Time:** 90 minutes

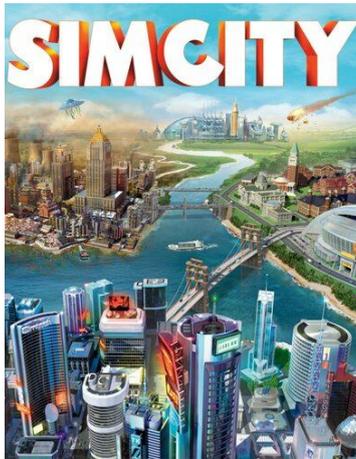
**Preparation:** The game is installed on PCs and tested; The youth worker is aware of the gameplay and prepared the theoretical information regarding the issue.

**Activities:**

1. Initiate a discussion where each participant shares their experience with gaming.
2. Each participant develops the strategy and implements it within the game.
3. Participants have to be very careful about their decisions and try to manage their city as good as possible.

**Reflection:** After playing there will be a debrief session where participants will discuss their strategies and which of their decisions went good and which of them not so good.

**Comments:** SimCity is an open-ended game where you create and build your own city from a blank map to begin and must expand the city with the budget provided. As the city grows bigger the players have more and more decisions to make in order to keep citizens happy and the city itself growing. The player must supply the citizens' services, which include health, education, safety, parks, and leisure. Inadequate funding of these services can lead to strikes. Cities must also provide basic utilities as electricity, water, and waste management.



## 13. The Sims

**Goal:** Development of social competencies of youngsters;

**Participants:** 10

**Age Group:** 13-21

**Time:** 5 days

**Preparation:** The game is installed on PCs and tested; The youth worker is aware of the gameplay and prepared the theoretical information regarding the issue.

### Activities:

1. Initiate a discussion where each participant shares their experience in gaming
2. Each participant will receive personal instructions about their avatar. For example, one of them will have a good job, another will not have a job. One of them will be drinking alcohol and someone else will spend all their money gambling or for expensive things.
3. Participants have to play for 5 days in a row in order to develop their character.

**Reflection:** After the fifth day they will present the results.

**Comments:** THE SIMS - This game is suitable because it is strongly connected to real life and can show youth workers that games can be used as a tool to teach youths things for life. The SIMS game can be used by psychologists who work with young people by asking them to create an avatar and then analyze it and its development.



## 14. World of Warcraft

**Goal:** improve social competences, strategic thinking, and interculturality.

**Participants:** 4 – 20;

**Age group:** 13 + ;

**Time:** 2 hours

**Preparation:** It's recommended for at least one youth worker to be familiar with this or similar games, to help players in case they get stuck.

Prepare the computers by installing the world of warcraft. It's a several gigabytes download, so it's recommended to copy it from an external drive on each machine.

Create a different trial account on each PC.

### **Activities:**

- 1) Explain shortly the activity and the focus of the goal.
- 2) Divide the players into groups. Each group will have a pc. Take care of ensuring a balanced skill level and no more than 3 players per machine.
- 3) Have each team create a character and give them a cool name. It's preferable if they create characters of different species but make sure that all of the characters are from the same team (Alliance or Horde), otherwise, they won't be able to interact in this exercise.
- 4) Before starting to play, ask each group to describe their character's personality and they believe its culture is like.
- 5) Let the groups play and give them ten minutes to get familiar with the game.
- 6) Have them play some missions on their own starting zone. Motivate them to learn about the culture of their characters and what situation they are in.
- 7) If they encounter other players, encourage them to chat with them, and ask them something about their country.
- 8) After about half an hour of play, have the players travel to the capital city of their faction (either Stormwind or Orgrimmar) and meet there. They can ask other players from directions but are not allowed to look up the path online.
- 9) Once all the groups have met in the city, have them discuss their character's culture, their history, and their own special abilities.
- 10) Have the characters create a group and venture outside the city to find new quests and kill monsters together.

## Reflection:

- Why did you choose your character? What did you find out about their culture?
- What other players did you meet in the game? From which countries were they from?
- Was it hard to find your way?
- How was your group dynamic? Did a leader emerge? Was somebody stronger than the others?
- How are you feeling about your character now?
- If you would play this game again, what would you do differently?
- What did you learn from this experience?

**Comments:** This game is an interactive online world where a player from all around the globe can meet. We will use this game to interact and learn about different cultures.



## 15. Appendix: bullying exercise;

There is a useful workshop exercise that can be used to illustrate how it feels to be bullied, in order for children or even adults to feel more empathy towards the situation. This exercise will also help the youth not become bullies themselves, as they will have a better understanding of the damage they might cause.

1. Ask the participants to pair up with another participant
2. Once they have done so, tell them the instructions of the exercise, which is the following:  
One person from each pair will have one minute to try and offend the other, while the other person in the pair is not allowed to defend themselves in any way. Once the minute has passed, ask them to switch roles, with the offender becoming the victim and vice-versa.
3. Have the participants return to their seats (or stand in a circle) and discuss with them one-by-one how they felt in each role
4. Ask the participants what suggestions they have to avoid getting hurt in such a situation
5. Give the participants some advice on how they can fight this form of bullying online, the list of recommendations above can be used as inspiration.

## 16. Appendix: prejudice and stereotypes around gaming (exercise);

The goal of this workshop is to teach youth about prejudice and stereotypes around gaming. The youth are given small red and green papers. The facilitator is reading statements and youth has to decide whether they agree with them or disagree. If they agree they raise the green paper and if not they raise red. The facilitator asks a few of them to explain their point of view. In the end, the facilitator explains is the statement stereotype or is not.

Statements:

1. People who play games are asocial.

There are many multiplayer games that people play in order to connect with other people. Also, some people see games as a tool for meeting people with the same interests.

2. Only boys play video games.

Many girls also play video games but still, the majority of gamers are boys. There is a lot of prejudice about girl players in the gamers community. Many male players think that girls can not be as good players as the boys but that is a stereotype.

3. Gamers have an unhealthy lifestyle.

Gaming can result in an unhealthy lifestyle if they become addicted to games. Then, they tend to sleep less, not think about their diet and sit all day in front of the computer playing games.

## 17. Appendix: Online bullies are bullies in real life;

This can be true, but it is not always like that. Online, since people have the advantage of anonymity, bullies do not have to deal with the consequences of their actions and the damage they might cause. However, in real life that is not the case, people are held responsible for their actions. Everyone around them will know personally who the bully is, which a lot of people would not want to be labeled as, so they refrain from acting in such a way.

Online bullying doesn't affect you as much as bullying in real life?

Contrary to common belief, online bullying can have the same consequences as bullying in real life. Sometimes it is even harder to cope with online bullying, as it does not stop upon leaving your school or work environment.

# Background

## General information about the Guideline

In our Developing society gaming has turned into a popular culture tool. As a result of globalization, many young people socialize via video games. Using the above-mentioned methods video games can develop specific competencies, attitudes, and skills of young people.

In video games, we have to follow some ethical rules. Being respectful to other players, avoid racism, sexism and bullying are just some examples. Talking about ethics we need to make it clear that there is no authority that can control or supervise gamers' behavior. It depends on the players themselves to control this. More information on this topic can be found in the chapter Avoiding Negative effects.

It is very important to be aware of which games are appropriate for certain ages.

**PEGI** is a European system for classifying games according to the recommended age of the players, mainly based on the amount of violence in the game. There are **5** age labels:

- PEGI 3 - in these games there are no frightening sounds or pictures. There is mild violence in a comical context. The aim of these games is to encourage creativity via pictures, sounds and simple tasks like drawing or building with simple bricks or parts.
- PEGI 7 - scenes and sounds that are possibly frightening. There is a mild form of violence in a non-detailed or non-realistic way. Also made in a way to encourage creativity and imagination through making up strategies, building or solving problems.
- PEGI 12 - fantasy characters or non-realistic violence to human-like characters.
- PEGI 16 - violence that looks the same as in real life.
- PEGI 18 - gross violence, motiveless killing, violence against defenseless characters. There could also be the usage of drugs or sexual activities.

That chart comes in terms of violence. Apart from that there are many games which focus is far away from violence and they could be a good way to teach young people leadership skills, creativity, and strategic thinking.

Creating a fun learning environment through gaming is a non-formal way of supporting young people and encouraging the development of their skills. Authors of this guideline want to make non-formal education more enhanced for the future. They chose different issues related to video games and connected with the skills and competencies they want to develop.



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## Learning English and other foreign languages

Learning languages is important for young people all around the world. By playing video games it can be also easier. When you start to play a game the process of learning languages starts at the beginning when the user has to deal with the menu of the game, which is probably written in a foreign language. After that, they can encounter lots of other unknown words when they play the game.

### Build basic and useful vocabulary with The Sims (Easy)

The Sims is a digital dollhouse and its main aim to build a little virtual family life. As a result, you will very quickly learn useful day-to-day vocabulary. This includes household items and furniture, family relationships, activities and job types.

#### Instruments for learning

- **reading:** This is a good method of understanding words because you can see them and memorize
- **communicating:** this method is effective because you interact and learn new words and more...
- **typing:** improve your spelling, understanding through language was formed and improve vocabulary
- **speaking:** by speaking, you combine all the instruments together that help you communicate correctly



#### Social life:

**Heroes of the Storm** – is a multiplayer online battle arena video game, that is based on social life. In every match, players work together as a team to achieve the ultimate victory condition which is to destroy the opposing team's main structure, called "Core", before the enemy's team does the same. Players can use some assistance of mercenary camps, battleground bosses, and a small group of computer-controlled units, called "minions"

Minions periodically spawn throughout the game in groups, marching along the lanes toward the enemy base. Using this game you improve English by playing it and interacting with team players.

**Defense of the Ancients** - The objective of the game is for each team to destroy their opponents' Ancient, a heavily guarded structure at the opposing corner of the map, which is based on the "Aeon of Strife" map for StarCraft. Players use powerful units known as heroes and are assisted by allied teammates and AI-controlled fighters. As in role-playing games, players level up their heroes and use gold to buy equipment during the mission. DOTA can help you in achieving a high rate of using words and phrases for your foreign language.

#### Health:

**Cooking academy** – this game can teach you all cuisine words in English and you can repeat after gaming with your family at dinner. This game has no age limit and has a lovely graphic.

**Just Dance**, - this concrete game can keep your body fit course of interactive base of the game, when u need to repeat moves from the screen, by downloading the game and playing start, you automatically learn English from songs and instructions and at the same time your body is working



#### Creativity:

**PaRappa the Rapper** - is also a musical game when you can record your rap music and listen to it after, creating your own sound using creativity and of course the game is in English, starting with instruments and ending with tools than can be used in real life as well.

#### Strategic thinking:

**Star Wars Battlefront 2** - In which you have a pretty developed multiplayer, 64 players in a battle, meanwhile you all speaking a language different than yours.

**World of Warcraft** - A open world which you develop and improve your language even gain social contact skills, the game is about finding, completing all types of quests  
In the game you will have to communicate with a lot of people because the game is a teamwork game, and there are plenty of quests you need more people and plenty of dragons and raids you need a big group of people and have to talk with them on Apps such as skype, team raid and more.

**Battlefield** - a game that will improve your reaction time and gain knowledge about warfare weapons.

In the game, you will have to talk with a lot of people during a battle

**League of Legends** - A Worldwide game of adventure, fights, strategy, a lot of fun and broken keyboards, in this game will teach you more than a single language, but also different types of skills

### **Team-work and leadership:**

**Star Trek** – is an online game or on the PS3 or PS4, it is an action game who is based on Teamwork and Leadership, a Role Game that can work only in the team , by this game you can totally improve your English level because of the chat between players.

**Lord of the Rings** – is about a fantasy world with you need to fight the creatures in order to take the rings, one of the biggest enemies are the black Ort, there also are other creatures that can help you to capture the rings. It also can be played single or multiplayer that can improve your English just by playing this game.

## **Problem management**

Problem management is a process when young people can prevent problems or solve their problems efficiently.

### **Social competence**

**Ibb and Obb** is a cooperative puzzle game where gravity is constantly being defined, progress is only possible if you truly work together. By playing with this game players can get problem-solving skills and besides that, they could gain other related competencies as well. One of these is social competence. We suggest that by allowing and even encouraging young people to engage together in games such as the one mentioned above, their social competence may be developed and improved (for the science behind this idea see References).

### **Creativity**

When solving a problem there is no doubt that creativity plays an important role. In a game where there is no specific goal (also known as a sandbox game) and where the possibilities for actions are almost countless, creativity can be considered a playground for creativity.

Minecraft is a perfect example of a sandbox game where players can terraform the blocky environment and build almost anything imaginable. We believe that by actively engaging the creative process in video games, young people could be developing their creative skills (see References for the science).

### **Healthy lifestyle**

A challenging topic in the context of gaming is health. Be it physical or mental health, it can hardly be argued that overcoming bad habits in order to achieve a healthy lifestyle requires perseverance. Games such as Cloudbuilt, an action parkour game where there is a perfect route to get to the end of the level as fast as possible and achieve a perfect score, require a good amount of perseverance. We believe that perseverance is a valuable lesson that young people can learn while gaming and then applies it, eventually in real life when they wish to achieve a healthy lifestyle. Another example is Pokémon GO, an app that requires you to walk all over town in order to find and catch little cute creatures. Problem-Solving skills such as orientation could be trained while using this gamified app. We believe that video games can be used to build skills required for developing a healthy lifestyle and that games can be used to literally get people moving (for the science see Appendix – Health).

### **Strategic thinking**



Managing a problem requires planning and strategy. There is an entire category of video games out there specifically based on strategic thinking. We believe that popular titles such as Starcraft, Teamfight Tactics or Age of Empires could be used in workshops given the fact that these games require a specific type of thinking in order to be successful. This thinking, if trained and

developed constantly, could eventually change the way youngsters deal with real-life problems, making them better strategic planners (see References for science). As a bonus, strategy games, for example, Capitalism Lab, require players to constantly manage resources effectively. This, we believe, is an essential entrepreneurial skill, when facing the obstacles of managing an organization (see References for studies).

### **Leadership**

Leadership plays a big role in games such as Counter-Strike: Global Offensive, Garry's Mod, Overwatch or even Overcooked (if you consider that something less violent is more appropriate for your group). In all these games, a player must manage and lead a team, developing his or her leadership skills. On the other hand, such success in a team-oriented game relies on the successful accomplishment of all roles in the team, teaching each player

about the importance of participation. Both leadership and participation are essential elements of tackling and managing complex real-life problems (see References).

## Community

Community is defined as a group of people who share the same interests and differentiate themselves through these interests from the society in which they live. There are many different kinds of communities depending on their central characteristics. However, regardless of this central characteristic, every community provides similar advantages for its members including easier and better communication, networking, solving specific problems faster and support in various situations.

### Social competence and leadership

Gaming communities may be built in many ways. Multiplayer games are one of the most significant examples of gaming communities. Through such video games, players experience building a team and explore different roles in that team thus using a wide range of social skills. Most online games require communication between players, either written or verbal. It can be thus argued that such video games facilitate social competences. Multiplayer video games could also develop leadership skills since players are required to make quick decisions in a limited time-frame.

One example of a multiplayer game is *League of Legends*, a game in which teams of five players battle against each other in order to occupy the other team's base. Each team should have 5 different roles: mage's and fighter's purpose is to attack, defender's purpose is to take the most damage, support's role is to heal and help his team and jungle's role is to surprise another team. If they lack some of the roles, the team won't be successful in achieving their goal. Therefore, this game teaches the importance of participation in the community in various ways, and the importance of every member of society.



### Creativity and strategic thinking

A great example of a game that connects creativity with community is the game *Anno 2205*. In this game, the player is making a virtual community by extracting resources from nature and combining them in a useful manner. The goal is to build different kinds of buildings in order to create a sustainable civilization. This is a game that teaches a lot about community life and the balanced use of resources. Moreover, it is a great game for the development of creativity, strategic thinking, and entrepreneurial skills because players have the freedom of using the resources in any way they choose. Another example is a game called *Minecraft*. In this game, you can terraform the world in survival mode while trying to find food and to build a shelter. In the creative mode, the main focus is creating projects, in the form of blocky buildings, of any shape and size. Both game modes require engaging in creative processes and both game modes can be played with friends, thus building communities with the common goal of survival or creation of buildings.

### **Healthy lifestyle**

Community plays a huge role in the individual's mental health, given the fact that it can strengthen social connections between the members, increase the feeling of safety, create a group identity and a sense of belonging and also offer purpose in everyday life. On the other hand, when an individual lacks any sort of community, the consequences might be feelings of loneliness, anxiety, and depression.

A gaming community is an alternative kind of social connection that is very valuable for enriching our social lives and it shouldn't be considered less important just because it is in the virtual dimensions. Even though many people claim that video games can damage the ability to become a part of the community, there are enough examples of people, which met in a virtual environment who ended up having healthy relationships in real life. Furthermore, the connections in the online environment exceed country borders. Gamers from different parts of the world can connect while playing and usually figure out that they have a lot more in common than they initially thought, thus building a global community.

The connection between community and video games can be found in a Turkish online game called *Sanalika*. Individuals aged 12 - 25 create their own characters and live in a town with these characters. In the game, players meet each other, go to beaches, parks, hotels, clubs and socialize in this imaginary town. Most of the people share their own personal contacts after playing together and actually build a community even outside the virtual environment.

Lastly, people who are socially anxious may be very shy in person but find it much easier to connect with others online. Once they get to know somebody through gaming, it is much easier for them to connect in real life too. Research has shown that people on the autism spectrum benefit a lot from the possibility to interact with others in the online world.

## Empathy

Empathy is generally defined as the ability to sense other people's emotions, coupled with the ability to imagine what someone else might be thinking or feeling. Research has uncovered evidence of a genetic basis to empathy, even though studies suggest that people can enhance (or restrict) their natural empathic abilities (The Greater Good Science Center, 2019). Empathy helps us in building social connections, regulating our own emotions, and it promotes helping behaviors.

Experiencing empathy for fictional characters allows people to have a range of emotional experiences that might otherwise be impossible. Here lies the great potential of video games in developing empathy in young people. Developers of video games can be very creative in creating various scenarios to show different perspectives on some problems. For example, it is shown that Virtual reality (VR) is very effective in inducing the feeling of empathy – it helps users to live in the situation more than when it is presented through conversation or through a traditional film. It can change people's perceptions of each other. An Erasmus+ project *VR not bullies* aim to establish an innovative approach of countering bullying amongst youth that uses this potential of virtual reality to teach young people about the devastating effects of bullying. The immersive VR scenarios which will provide young people with the experience of bullying from three perspectives (perspectives of the bully, victim, and bystander) will help them to better understand the damage that bullying does to victims, as well as strengthen them to oppose bullies in their school environments.

Another example is a game called *ICED - I Can End Deportation*, designed by a popular American new media artist, Heidi J. Boisvert. In the game, players need to choose one of five characters who are immigrant youth and they are asked to make choices in their daily lives, which affects their chances to survive in the U.S. without experiencing detention or deportation. Therefore, they encounter the difficulty of living under strict U.S. immigration policy.

## Stress & Anger management

### Single-player games

Remember why you are playing video games! You probably play just because you are enjoying them. But if playing video games is causing you to have recurring anger, then you might not be enjoying yourself as much as you used to. One of the causes of anger in single-player games is the difficulty of the game. When the difficulty of the game is too high it can be very frustrating and less fun.

## Multiplayer games

**Know the root of your anger in the game:** Sometimes you can be angry because of your actions in the game, but you can also be angry because your teammates are not playing according to your standards. You should try to differentiate between these two situations. If your playing is causing your rage, you need to ask yourself what exactly in the game is making you angry. If you can not change anything, try using calming techniques that are listed below.

Anger and stress can also affect your strategic thinking which is very important in multiplayer and competitive games. If you want to play at your best level after you make a mistake in the game which makes you angry or stressed it would be useful to recover fast. It could be even more important for the leadership or "shot caller" in the game because he/she has the most responsibility.

## Tips and calming techniques

Video games can often make people angry due to different reasons. First of all, even professional gamers who play League of Legends win in only 55% of their games. So it is impossible for you as a "casual" gamer to win every time. Of course, losing a game is not the best feeling in the world. Players often feel anger and even rage when losing the game. Anger issues are not so easy to overcome, but there are some tips and strategies that can help players calm themselves down in a moment.

**Pay attention to your body:** How is your body feeling? The most important thing is to learn how to recognize signs of anger: tense muscles and clenched jaw, headache or stomach ache, increased heart rate, sudden sweating or shaking or a dizzy feeling.

### Make a pause from playing:

- Go to the kitchen and drink some water or make yourself a snack.
- Call your friend on the mobile phone
- Go for a short walk around the neighborhood
- Clean your room or do some other house chores
- Get physical exercise: It increases hormones endorphins

**Put down your controller:** When you start to feel the first signs of anger in your body, try to put down your controller immediately. This is the better option than you breaking the controller.

**Breathe deeply:** There are many breathing techniques which you can find online

**Stop playing and count to 10:** This will give you some time to get your mind off the game. Anger usually can not last longer than a few minutes

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The logo for "GAME ON" features the word "GAME" in a bold, blue, sans-serif font, followed by "ON" in a bold, purple, sans-serif font. The letters are slightly shadowed, giving them a 3D appearance.

### Think about other things in your life that are connected to your anger

- Are you in a good relationship with your family and friends?
- How do you feel about school or your job?
- Do you feel like you have control over your life in general?
- Is there anything else that is bothering you?

### Play a less violent video game

#### Choose an easier game

#### Block or avoid another player who is being “toxic”

**Ask help from a professional:** There are many experts such as psychologists or psychotherapists who can help you with your anger management problems. Even professional teams of League of Legends have more staff members than athletes. Staff members can include psychologists, personal trainers, cooks, analysts and coaches for the game. This could also help you improve your overall mental health and give you a chance to talk to somebody about your problems.



### The science behind stress

Stress, in everyday terms, is a "feeling that people have when they are overloaded and struggling to cope with demands" (MedicalNewsToday, 2017). In a situation when you are faced with a challenge, the body activates resources to protect you by preparing you either to stay and fight or to get away as fast as possible. At that moment the body produces a big amount of hormones: adrenaline, noradrenaline, and cortisol. These hormones put your body in an alert state: sweating, higher heart rate, and blood pressure, faster breathing, the muscles become tense, immune activity decreases, the digestive system slows down. There are individual differences in how people react to stressors. If you persistently have strong reactions to stressors it can endanger your health in the long term. This is why it is beneficial

for people to know what are their stressors and how do they react to them to manage it more effectively (MedicalNewsToday, 2017).

There is plenty of evidence showing that playing video games can relieve your stress and make you feel better. Recent research shows that people who are playing video games after their job have a better overall recovery from work-related stress that day (Collins and Cox, 2014). Even though this correlation does not imply causation, it is worth a try playing relaxing video games after school, work or university and see if it works for you.



In another study, participants were separated into two different groups. In the first group, they played competitive games and in the second group cooperative games. In both groups stress decreased after playing video games, but the decrease was bigger in the cooperative group (Roy and Ferguson, 2016).

## Avoiding Negative Effects

Throughout this chapter different potential negative effects of video games will be discussed, both in physical and mental terms. These effects can vary in a wide range from severe, such as pathological preoccupation with video games, to mild ones, such as experiencing slight back pain. Studies have also shown a decrease in prosocial outcomes and an increase in aggression. Furthermore, there is a high risk of getting addicted when it comes to children and adolescents. Prevention of these is of the essence for gaming to be used to facilitate learning, strategic thinking and problem-solving. It is also important to educate youth about prosocial online behavior. Finally, advice will be given on possible best practices when problems have already occurred and prevention is no longer possible.

### Prevention

There is such diversity in games, so it is important to know what are young people picking up from these games or what they might be exposed to. Therefore, it is necessary to take some precautions to prevent the negative effects of video games, like mental or physical disorders. In order to overcome these damaging effects, young people should be more conscious of the ways to protect themselves.

The ways of preventing harmful sides of gaming can be:

- Setting time limits to play and stick to them.

- Keeping phones and other gadgets out of the bedroom so they won't play into the night.
- Doing various other activities every day, including exercise. This will lower the health risks of sitting and playing for long stretches of time.
- Taking into consideration which games are age-appropriate.
- Educating young people about the harmful effects of excess gaming.

### **Age restrictions**

It is necessary to decide whether the game is suitable for young people or appropriate for their age group. If it is not, they should be warned about the potential dangers which they may face.

### **Time restrictions**

It is crucial to make sure that video games are not consuming too much of the player's time, so there should be a balance between time spent gaming and time spent on other activities. This topic should be discussed with young people in order to avoid the negative effects of spending too much time on gaming. We should make them think about how long a gaming session should or shouldn't be. In addition, instead of saying 'Time's up', a parent could suggest some attractive activities that could be done instead of gaming, such as arts, crafts or reading books. In this way, parents can help their children avoid spending too much time with games.

### **Online behavior - cyberbullying**

Many people do not think about consequences when entering the online world. The fact that they can remain anonymous may result in breaking social norms and disrespectful or even violent behavior towards other online users. This can be done by highlighting that online life has the same behavioral rules as real life. For example, shouting at a person online can cause them the same amount of distress as if they were shouted at in real life. That is why it is essential to educate youth to avoid such patterns. These guidelines include a chapter on stress and anger management, which can also be relevant to use as tools for teaching prosocial behavior.

Some youth end up on the other side of online bullying, they find themselves in the role of the victim and often do not know how to protect themselves. It is important to teach youth that there are ways to assertively stand up for themselves. Here are some simple guidelines you can tell to the young person who became a victim of bullying in online video games:

- Don't respond with aggression: often reacting in an aggressive manner can make the situation worse and put you at risk of further abuse.
- Block/report the person that is bullying you - these options are in place to support and protect gamers from abuse.
- Never give away personal information, like your full name, telephone number, school, home address, etc.
- Do not take it personally: the person who is abusing you in-game is the one with the issue, not you.
- Do not seek revenge: try to look at how you can move forward in a positive way, putting the person who is cyberbullying you firmly in the past.
- Do not isolate yourself from friends and family: try to keep up with your normal social life and activities you enjoy – the distraction will help lift your spirits and remind you of the positive things in your life.
- Tell somebody you trust: it doesn't even have to be an adult – it could be an online or offline friend.
- Keep a record: remember that you should be vigilant from the beginning and take a screenshot of anything offensive. This can be used as evidence when talking with game administrators.
- Take some time out: step away from the game and remove the cause of stress. Give yourself a chance to see things a little clearer – that way you can decide what the best plan of action is. (Parent info, Ditch The Label, 2018)

## **Mental and physical effects of gaming**

### **Gaming disorder:**

According to the World Health Organization, gaming disorder is a real mental health condition that is defined as a pattern of persistent or recurrent gaming behaviour, which may be online or offline, manifested by impaired control over gaming, increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities and continuation or escalation of gaming despite the occurrence of negative consequences.

Signs that a child or adolescent is addicted to video games:

- The child spends the bulk of his or her free time playing video games
- He or she begins falling behind in classes, missing classes, or fail to complete assignments
- An increase in verbal and/or non-verbal aggressive behavior towards others
- Showing a preference for playing video games rather than spending time with family or participation in other activities
- Suddenly dropping out of activities they enjoyed previously

- He or she shows signs of withdrawal such as irritability, anger, or agitation when they are not able to play video games (American Addiction Centers, 2019)
- If you see a child or a teenager spending a lot of time playing video games, it does not have to mean that he is addicted to them. It is important to look at the ways he reacts when he has to stop playing or to look for any additional problems because of intense gaming.

Signs of adults addicted to video games:

- Preoccupation with video games. The individual thinks about previous gaming activity or anticipates playing the next game; gaming becomes the dominant activity in daily life.
- Withdrawal symptoms when gaming is taken away. These symptoms are typically described as irritability, anxiety, boredom, cravings, or sadness.
- Tolerance – the need to spend increasing amounts of time engaged in video games. This may be motivated by a need for the completion of increasingly intricate, time-consuming, or difficult goals to achieve satisfaction and/or reduce fears of missing out.
- Unsuccessful attempts to control participation in video games.
- Loss of interest in previous hobbies and entertainment as a result of, and with the exception of, video games.
- Continued excessive use of games despite knowledge of psychosocial problems. The individual continues to play despite a negative impact.
- Has deceived family members, therapists, or others regarding their gaming.
- Use of video games to escape or relieve a negative mood (e.g., feelings of helplessness, guilt, anxiety).
- Has jeopardized or lost a significant relationship, job, educational, or career opportunity because of participation in video games. (American Addiction Centers, 2019)

Because of gaming disorder, youth can have additional problems such as depression, anxiety, anger, relationship problems, sleep deprivation, an unhealthy lifestyle and etc. If someone is experiencing depression, anxiety or any other mental difficulties because of spending too much time playing games, he/she can seek help from a psychotherapist. Youth can get involved in individual or group therapy. Game addiction can be very difficult to overcome because computers are a big part of everyday life so solutions like avoiding computers are not realistic. Because of that, many treatments are focused on responsible gaming and finding a way to control the impulse to play games all the time. There is a community called Game Quitters. Their vision is to provide the best tools, resources, and support for any person who wants to quit playing video games – regardless of why they want to do so. They are providing all of their services for free. You can find their page on this link: <https://forum.gamequitters.com/>. When talking about the effects on physical health, gaming disorders can have a serious impact because of a sedentary lifestyle and unhealthy habits.

Many gamers tend to play for more than 10 hours, eat in front of the screen and play during the night. As we already mentioned, gamers should become aware of their unhealthy habits and try to change them.

**Here are some tips about having a better lifestyle:**

- Wake up and go to sleep at the same time every day
- Get enough sleep
- Have at least one home-cooked meal a day
- Don't eat in front of the computer
- Exercise regularly
- If you have to sit in front of the computer for a long period of time, try to use pilates ball to strengthen your back

## References

- Ayenigbara, I. O. (2018). Gaming Disorder and Effects of Gaming on Health: An Overview. *Journal of Addiction Medicine and Therapeutic Science*, 001-003.
- Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *American psychologist*, 69(1), 66.
- Kowert, R. (2014). *Video games and social competence*. Routledge.
- Kowert, R., & Oldmeadow, J. A. (2013). (A) Social reputation: Exploring the relationship between online video game involvement and social competence. *Computers in Human Behavior*, 29(4), 1872-1878.
- Hendrix, K., van Herk, R., Verhaegh, J., & Markopoulos, P. (2009, June). Increasing children's social competence through games, an exploratory study. In *Proceedings of the 8th International Conference on Interaction Design and Children* (pp. 182-185). ACM.
- Bellotti, F., Berta, R., De Gloria, A., Lavagnino, E., Dagnino, F., Ott, M., & Mayer, I. S. (2012). Designing a course for stimulating entrepreneurship in higher education through serious games. *Procedia Computer Science*, 15, 174-186.
- Bitterberg, T., Hildmann, H., & Branki, C. (2008). Using resource management games for mobile phones to teach social behavior. *FRONTIERS IN ARTIFICIAL INTELLIGENCE AND APPLICATIONS*, 169, 77.
- Lisk, T. C., Kaplanali, U. T., & Riggio, R. E. (2012). Leadership in multiplayer online gaming environments. *Simulation & Gaming*, 43(1), 133-149.
- Qiu, L., Tay, W. W., & Wu, J. (2009, October). The impact of virtual teamwork on real-world collaboration. In *Proceedings of the International Conference on Advances in Computer Entertainment Technology* (pp. 44-51). ACM.
- Bailey, C., Pearson, E., Gkatzidou, S., & Green, S. (2006, June). Using video games to develop social, collaborative and communication skills. In *EdMedia+ Innovate Learning* (pp. 1154-1161). Association for the Advancement of Computing in Education (AACE).
- Ott, M., & Pozzi, F. (2012). Digital games as creativity enablers for children. *Behaviour & Information Technology*, 31(10), 1011-1019.
- Green, G., & Kaufman, J. C. (2015). *Video games and creativity*. Academic Press.
- Lastowka, G. (2011). *Minecraft as web 2.0: Amateur creativity & digital games*. Available at SSRN 1939241.
- Henriksen, T. D. (2006). Games and creative learning. In *Role, Play, Art*. Published in conjunction with the 10th Knutpunkt Convention.

- Morgan, J., & Mungan, Y. (2014). Fine Arts, Culture, and Creativity in Minecraft. *Understanding Minecraft: Essays on Play, Community, and Possibilities*, 175-190.
- Brown, K. W., & Ryan, R. M. (2004). Fostering healthy self-regulation from within and without: A self-determination theory perspective. *Positive psychology in practice*, 105-124.
- Pajari, P. M., Jallinoja, P., & Absetz, P. (2006). Negotiation over self-control and activity: An analysis of balancing in the repertoires of Finnish healthy lifestyles. *Social science & medicine*, 62(10), 2601- 2611.
- Prensky, M. (2006). *don't bother me, Mom, I'm learning! How computer and video games are preparing your kids for 21st-century success and how.*
- Cannon-Bowers, J. A., Bowers, C., & Procci, K. (2011). Using video games as educational tools in healthcare.
- Thompson, D., Baranowski, T., Buday, R., Baranowski, J., Thompson, V., Jago, R., & Griffith, M. J. (2010). Serious video games for health: How behavioral science guided the development of a serious video game. *Simulation & Gaming*, 41(4), 587-606.
- Rahmani, E., & Boren, S. A. (2012). Videogames and health improvement: a literature review of randomized controlled trials. *GAMES FOR HEALTH: Research, Development, and Clinical Applications*, 1(5), 331-341.
- Peng, W., Lin, J. H., & Crouse, J. (2011). Is playing exergames really exercising? A meta-analysis of energy expenditure in active video games. *Cyberpsychology, Behavior, and Social Networking*, 14(11), 681-688.
- Liedtka, J. M. (1998). Strategic thinking: can it be taught?. *Long-range planning*, 31(1), 120-129.
- Squire, K. (2005). Changing the game: What happens when video games enter the classroom? *Innovate Journal of online education*, 1(6).
- Fabricatore, C. (2000). Learning and videogames: An unexploited synergy.
- Adachi, P. J., & Willoughby, T. (2013). More than just fun and games: The longitudinal relationships between strategic video games, self-reported problem-solving skills, and academic grades. *Journal of youth and adolescence*, 42(7), 1041-1052.
- Zamani E., Chashmi M., & Hedayati N. (2009). Effect of addiction to computer games on the physical and mental health of female and male students of guidance school in the city of Isfahan. *Addiction & Health*, 1(2), 98–104.

## Webography:

<https://addiction-treatment.com/types-of-addictions/video-game>

<https://gamequitters.com/video-game-addiction/#what-is-video-game-addiction>

<https://www.thebalancecareers.com/problem-solving-skills-with-examples-2063764>

<https://education.uconn.edu/2013/05/29/well-designed-video-games-can-enhance-problem-solving-skills-and-make-learning-more-effective/>