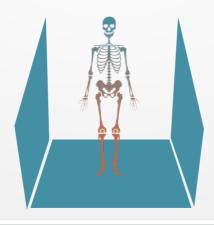


ESCAPE ADVENTURE MODULE

HUMAN PROCESSOR

FORMAT: SPACE DIVIDER



DEVELOPED BY:

Lex Eijt

Democratic Secondary School VO de Vallei, The Netherlands **INCLUSION TOPIC:**

Self-exclusion

TARGET GROUP:

12+

N° OF PLAYERS:

9 - 13

TIME:

50 min.



Content development information & Property rights:

This educational material was developed by the partnership between 4 countries under the project Escape Exclusion, funded through a Strategic Partnership Key Action 2 in the Erasmus+ Education Programme of the European Commission to support educators to read, share and use all these materials created by our Partnership.

We would also love that when you share or use, you follow these creative commons rules. We ask you to always mention original authors of this materials, in respect of their intense work and their willingness to continue exploring methods to help another educators" The Intellectual Outputs of this Escape Exclusion project therefore are freely available for the non-profit sector and educational sectors, and we wish it will be useful for you educators out there.

Note! However, this material cannot be used for commercial purposes. Nothing of the content or design of this Starter Kit and its components can be sold to others, used for profit reasons, or used as material for workshops or courses that participants have to pay for. Nor can any of this material be pretended to be developed by someone else or another NGO or company.



- **Attribution** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
 - NonCommercial You may not use the material for commercial purposes.
 - **NoDerivatives** If you remix, transform, or build upon the material, you may not distribute the modified material.
 - No additional restrictions You may not apply legal terms
 or technological measures that legally restrict others from doing
 anything the license permits.

www.lookingatlearning.eu



Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) Layout: Javi Quilez Layout: Javi Quilez javi@promesas.eu

"A GATEWAY TO ANOTHER PART OF MY BRAIN, A WAY TO ESCAPE MY DAILY LIFE IN A FUN AND STIMULATING WAY. AND ALL THIS WHILST BONDING WITH OTHER PEOPLE,"

LEX EIIT







Aim of the Adventure: This adventure gives way for starting a conversation about exclusion. That sometimes it doesn't matter how inclusive your surroundings are, you can still feel excluded. Awareness about how exclusion could also be a part of your own behaviour.

Also for biology teachers, this adventure lets students get a feeling about how processes work in the human body and more general knowledge about the human body itself.



Learning Objectives

- Raising awareness of the part which individuals and groups play in the whole;
- Knowing more about processes in the human body, for example:
 - How to create hormones;
 - How emotions affect the body;
 - o How every process in the body is affecting another;
 - o How drugs affect the body.



Duration

Preparation of the materials:	Minimum 2 hours
Setting up the space before the adventure:	30 min
Intro time:	10 min
Play time:	50 min
Debrief/ evaluation time:	Minimum 10 min



N° of players

The best number for this adventure is a group between 9 and 13 people.





General overview of the Adventure

The players form one human body. This human body is split into 5 functions: Brain/ main body (1p), senses, emotions, bones/muscles, organs. The human that they all form, finds itself after waking up on a cold hard floor, not knowing how it got there. It's up to this body that they find out where they are and escape. They have to escape from a slaughterhouse by solving puzzles in 3 rounds. The puzzles match the body part/function. This results in quite a range of diversity in puzzles. For example, the senses have to do a silhouette puzzle (sight), an audio puzzle(hearing) and a maze puzzle (spatial awareness).

After that the group will "leave" the slaughterhouse and they are free.

Then comes a reflection on what has happened during the escape adventure, how they feel, what they've learned etc.



Guiding the process

Support is needed when a body part / function takes too much time in solving their puzzle. Because then the other groups have to wait for too long. The facilitator should keep an eye on all the groups to see how they are progressing and help when a group is lagging behind.

Also intervene when students are having an argument about how to solve a puzzle.



Level of ownership

This adventure creates ownership on multiple levels.

They will experience they have to take ownership of themself in their level of participation in the group. They're responsible as a smaller group for the whole. So they have to ask themselves what can I do?

Educators can ask the students about these things in the debriefing to increase the level of ownership. You can never guarantee ownership, because like feeling included, ownership is something you have to take for yourself.







Level of inclusion

Well considering that this escape adventure requires a form of exclusion, the level of inclusion during the game changes. In the debriefing, you'll have to talk about how individuals are important for any group, but also that groups are important for each individual. So that everybody learns about the meaning of this adventure. The puzzles per area are different, so you can play this game multiple times and have a different experience every time if you let people occupy different areas and let different people be the brain/ main body. The puzzles are quite diverse and give a high level inclusion for different types of thinkers and problem solvers.

In the beginning the group has to make a decision which body part they take on, not knowing what will happen. Checking beforehand with what kind of puzzles they have affinity with, so the teacher can sort them into groups based on that might increase the level of inclusivity.





SETTING UP THE ADVENTURE



Location, Ambience

Needed:

A big enough room to make 4 areas and in the middle a circle or square for the brain/ main body. The tables in the classroom can be used to divide them. Briefing in another room. Before you let the other participants in, you have to "lock" the person who is going to be the brain/ main body in the playing room.

Additional/Optional:

Darken the play room from light outside, use only artificial lighting. Put here and there bloodstained hands, using paint or fake blood.

Additional/Optional: Monitoring can be made from the same room, and that is fine, but it could help the feeling of escaping if you could monitor from another room.



Game components

Most of the required components are digitalised and ready to "Print & go". Click on the icon to download the components of this module.





Once you have downloaded it, make sure you have:

3 combination locks

3 padlocks

1 directional lock

Something to divide the room.

1 chair + 1 table for 'the brain'

5 chains/ ropes (or 1 long one) to "bind" the

brain and put the locks on

A glass jar and tape to tape the jar to a table

A box/chest that can be closed with a

combination lock

100 pieces of lego, 40 (white), 30 (red), 20 (blue)

10 (green), colours can be different but the

amount cannot

Printed materials

Own made sliding puzzle (but this could be printed).

A smartphone that can be used for the qr-codes and playing the sound sample

A molecule set used in biology or chemistry lessons (or 3 blue balls, 1 green ball, 9 red balls, 13 smaller grey balls, 29 toothpicks or something similar but bigger. The balls should be made from a material like styrofoam or modelling clay.)

Optional for ambiance:

Fake blood

Latex gloves

Music from silent hill

Materials to blind the windows.

Semi transparent paper to put over the lamps for a dimmed light.



Additional preparation



For additional team building and group making, it is recommended to give the members of each group a distinct accessory to show to which group they belong. For example: A T-shirt with a skeleton print for muscles/bones or funny glasses for the senses etc.

FULL DESCRIPTION



Intro & Narrative

"Each of you is a part of a human body. One person will be the brain, the rest of the group will be divided by me into 4 equal groups. You can in advance tell me which kind of puzzles you like. The person who will become the brain will have to enter before the rest.

The groups are:

- Emotions
- Organs
- Muscles/ bones
- Senses

Each group will have to go to their designated spaces, once in your space you may not communicate with other groups except the brain.

You start with puzzle's of round one. You're allowed to go to the next puzzle after the brain has given a summary of the current round. If you are waiting for others to finish you can observe the others, but don't disrupt them."

Scenario

"You're waking up, you open your eyes and you see all blurry. Dazed you look around you, whilst doing so, you notice you're lying on a cold stone floor. Slowly you realise that you don't know where you are and how you've got there.

It's up to you all to learn about what happened and how to escape the situation."

The person who is the brain has to go in the room and "lock the brain up". Give them the following narrative.

"You are the link between the body parts/ functions, each form of communication has to go through you. At the end of each round you summarise what has happened this round so the others know what has happened. After that you explain (as is written on your round card) which puzzle the others have to do and why."







Description of the flow of the Adventure

3 rounds. In every round each group has to solve 1 puzzle. Only after every body part/function has solved their puzzle the Brain gives the go for the second round after telling what happened in the first round.

The solution of one body part/ function gives another a new puzzle.

The puzzles match the body part/function. This results in quite a range of diversity in puzzles. For example, the senses have to do a silhouette puzzle (sight), an audio puzzle(hearing) and a maze puzzle (spatial awareness)



Walkthrough

Round 1.

Senses

Suddenly the blurriness starts to lift and you can take a real good look at your surroundings. The room you're in contains only dim light and you can't even see the other side of the room. You can see that the room has white tiles from top to bottom, first a silhouette puzzle that leads to 4 objects. This solution is given to the brain. Which will have to decide where you are (a slaughterhouse)



Muscles/ Bones

Whilst the senses try to see what's in the room. The muscles/ bones try to stand up. But there's resistance. You're shackled to an iron pipe, the shackles are armed with a lock. This lock is a sliding puzzle, after solving the puzzle for 95%, the lock doesn't unlock. This information is given to the brain.



Emotions

Being dazed and confused, not knowing where you are. A loss of memory isn't helping either. You try to find out what you remembered last. The first puzzle is a rebus, this will give the solution. The last thing you can remember is that it was really hot outside and you ate an ice cream cone at that shady place. This information is shared with the brain.



Organs

The organs are busy with breaking down drugs. They do so in the form of a puzzle. The puzzle is a jigsaw puzzle, you've found a medicine bottle with the label torn off. If the label is put together it forms a qr-code. When they follow this, they find out that anaesthesia is used, and there is a list of symptoms the list they get as a solution is given to the brain.



Brain

Senses first solution helps the brain realise where you are (the brain has to choose from multiple options what it could be). Solution: Abattoir/ slaughterhouse. This information is given to the emotions and that starts their next puzzle.

When Muscle/ Bones gives their first almost complete solution, the brain has to give the senses the order to find the missing piece for the sliding puzzle. This gives the senses their next puzzle.

Emotions first solution is given via the brain to the organs, this gives the organs their next puzzle (maybe the brain has to decide which hormone to make (in the form of a puzzle).

Organ's list of symptoms is given by the brain to the muscles/bones (or every body part). But the anaesthesia has a muscle relaxation component, it gives the muscle/bones their new puzzle.

It's up to the brain to reconstruct what happened to you and what the current situation is. Upon receiving all information, you have to make a multiple choice quiz. So you have a better understanding of what is happening.





Round 2.

Senses

Finding the missing piece for the lock puzzle. They look around and see a small box with a combination lock and a qr-code, this leading to a sound puzzle that leads to the combination of the lock. The piece for the sliding puzzle is given to the brain so it can finish the sliding puzzle with muscle/bones and this way releasing the main body from its shackles.

Muscle/bones

Due to the relaxing nature of the anaesthesia, the muscle/ bones have to do a silhouette puzzle to increase the blood flow and by doing so disperse the anaesthesia better and circulate the adrenaline. This will give the liver more of the anaesthesia so it can be broken down. The puzzle will be containing silhouette's, they have to lay down in that form, and it will form the word liver. The answer is given to the brain.

Emotions

The emotions will receive the information that you are in a slaughterhouse, this will result in the emotion fear. The emotions get the assignment to find X (fake) hint cards for this round. Each hintcard is given to the brain, and these hint cards have to be given to the other body parts. (This will create the illusion of fear being disruptive to the body). If all the hint cards are found they complete their assignment.

Organs

The organs have to produce the hormone adrenaline C9H13NO3, this will be in the form of a puzzle which forms the molecule adrenaline (they are given the needed atoms in the form of coloured balls with a toothpick coming out of it) Red = carbon, Green= Nitrogen Blue= Oxygen, Grey= Hydrogen. The solution is given to the brain. After this solution is given to the brain, the brain is able to give hints to the other body parts when they ask for it.

Brain V

The senses will give the brain the sliding lock part. The brain has to relay this to the muscles and this starts their 3rd puzzle.

Muscle/ bones will give the brain their solution. This information is given to the organs, and it will start their 3rd puzzle.

Emotions will give the brain X hint cards that the brain has to give to the other body parts. One of the fake/useless hints contains a real clue (the real clue has a symbol on it that also will be on the next puzzle) for the senses. It will give them a clue about where to find the exit, this gives the senses their next puzzle.

The organs will give the brain their solution, unlocking the brain's ability to give hints to the other body parts. This triggers the fight response, and this is given to the emotions and starting their 3rd puzzle.





Last round

Senses

There is a map of the building, the senses have to find the quickest way to the exit. Maze puzzle, with a directional lock.

Muscles/ Bones

When receiving the last piece of the sliding puzzle, it can finally be solved completely. By doing so the shackles unlock. The main body can finally move, and moves to the door. The door is locked with multiple locks but only one that can be opened with a key. Next to it, there is a box/ring with multiple keys. Find the right key to escape from this room. Multiple keys puzzle. They give the key to the brain.

Emotions

The fight response is triggered. This human is feeling brave. On the door there is another lock for you to open. Next to the door are 4 containers with unidentified substances in it. It's obvious that the key should be hanging above these containers. But it probably fell into one of the containers. Feeling brave, you decide to stick your hand in the boxes in search of the key. Simple padlock, but you need 4 containers with different substances and the key in a plastic bag in one of the containers. As a help, there is also a ghostleg puzzle. But only a part of the ghostleg puzzle is hanging above the box.

Organs

Organs have to break down the anaesthesia,

They are given a structure of lego (representing the anaesthesia) containing 4 colours. They have to break it down in smaller pieces. Counting how much per colour there are, the colours represent atoms found in the anaesthesia. This will give a ratio (100 lego pieces, 10 green, 20 blue, 30 red, 40 white. This ratio is the answer to the code puzzle the brain have to solve, so the ratio and colours are given to the brain

Brain

There seems to be another lock on the door. This is a combination lock. (On this lock there is input for 4 numbers, and a symbol, this symbol is also found on the quiz from round one). After each lock from the 3rd (last) round is opened, the main body (and thus everybody) is freed.



What to observe during the adventure

How was the team work?

Who stopped participating?

What was the level of inclusion and did that change during the rounds? Why did they change, was it because they gave room to each other or was it because of the puzzles?







Reflection

The debriefing is actually one of the most important parts of this escape adventure, you have to give way for a conversation about how people felt and about the level of inclusion they experienced. For the biology teachers it is also important to check what they have learned about the human body.

There isn't a definite structure or questions to a good conversation.

But there should be a focus in which topics you should discuss:

- Inclusion/ exclusion and how that changed during the adventure;
- Biology;
- Ownership.

And some suggestions for questions to ask:

- How included did you feel as the brain/ main body? Did this change during the game? And if yes, why do you think it changed? If not, what was necessary to change that feeling?
- How did you feel as a subgroup within the whole? Even though being in a subgroup, did you feel like you belonged to a bigger team?
- How was it to be dependent as a group on an individual?
- How was your own level of participation?
- What did you learn about biology?



Additional notes

Self-exclusion is imbued in the way you play the game, one of the players chooses to be excluded. Then during the adventure they learn as a group that you are depending on other individuals and as an individual you also depend on the group to be functioning as a whole.

Beware that emotional risk is at hand, you don't want to put someone who isn't somewhat mentally stable in the position of the brain. Because they will feel excluded at the beginning of the game.

It depends how big the groups are to see if it's okay if someone wants to quit, but in each squadron at least one person has to see it to the end.

During the escape adventure it could happen they lose interest in the game if they have to wait too long for other groups to finish. Maybe you could let them help each other or let them observe.

Students don't actually have to know things beforehand. But it could help them. What will make it the most safe is, remove the time factor, so they have time to finish it and it's made in a way that everyone should be able to finish it. If students have more knowledge about the subject, they will see solutions faster.

This adventure has quite some variables and in order how to deal with those variables changes every time depending on the group of players and the room the game is played in. Be creative and flexible.







Setting up the tools for the adventure

You will need:

- Printer
- Piece(s) of cardboard (not necessary but makes it more sturdy).
- Knife and/or or scissors
- Glue (only needed if you decide to put it on cardboard)
- Envelope called "Senses Round 3" containing morse code table and alphabet with numbers table.
- 4 Envelopes
- Glass Jar and tape to tape this to a table
- Rebus made in your own language, English is provided.
- Black Marker
- Printed materials
- Dividers (tables for the classroom should suffice, but if your school has dividers they can be used too).
- Chair and table for the brain
- 3 combination locks, 3 padlocks and a directional lock.
- Molecule making set.
- MP3 file with morse code on it if you want to change it to your language, English is provided.

As alternative to the molecule making set:

- 3 blue Styrofoam balls
- 1 green styrofoam ball
- 9 red styrofoam balls
- 13 smaller grey styrofoam balls
- 29 toothpicks or something similar but bigger.
- If you're making a sliding puzzle yourself you'll need:
 - Cardboard.
 - Wood (stirring sticks for paint)
 - Spray paint
 - Wooden block, with a screw in it, and a little magnet glued to it.









Step by step instructions on how to set up the game tools

Puzzles and Materials

Round one Puzzle Materials needed + instructions

- Senses Silhouette 16 pictures of random things. (found in printing round 1.2)
- 4 pictures of items you can find in a slaughterhouse (found in printing round 1.2)
- Copies of the 4 pictures, made black with a marker so there's only a silhouette.
- Muscles/ Bones Sliding Sliding puzzle preferably made out of cardboard. But you can print out the example
- Padlock
- Glass jar that's too small to put your hand in.
- Tape
- A screw or another metal object on a rope.
- Emotions Rebus Rebus forming 3 sentences. Printed
- https://www.rebuses.org/
- Pen and paper.
- Organs Jigsaw QR-code printed (use a qr-code generator, watch out, most generators expire after 7 days)
- Piece of cardboard (not necessary but makes it more sturdy).
- Knife or scissors
- Glue (only needed if you decide to put it on cardboard)
- Brain quiz Gamecard round 1, with a question about where you are. And other instructions

Round two

- Senses Sound QR-code printed and glued to small container
- 4 number combination lock with code 5733
- Envelope containing morse code table and alphabet with numbers table.
- Paper and pen for the group.
- Muscles/ Bones Physical silhouette Print out the letters needed for the word Liver.
- Extra letters for confusion. (Watch out that they can't create other words with it). In English the recommended letters are, L, I, V, E, R, O, K, W, Q, J
- Emotions Hints assignment 9 hint cards
- Make these by glueing the hints in printing round 2.1 to the backs of the pictures of the other groups in printing round 2.2
 - Organs Atoms Molecule making set.







As alternative

- 3 blue Styrofoam balls
- 1 green styrofoam ball
- 9 red styrofoam balls
- 13 smaller grey styrofoam balls
- 29 toothpicks or something similar but bigger.
- Brain Ability to give hints is unlocked. 4 Hint cards for the next round.
- Round instruction card



Round 3

- Senses Maze puzzle A maze puzzle representing the slaughterhouse
- A directional lock set to the combination of the first 8 directions of the solution of the maze puzzle.
- Muscles/ Bones Multiple Keys At least 25 different keys
- A ring to put the keys on.
- Padlock
- Emotions Substances A padlock
- A box with numbered holes in the top for the four substances.
- A ghost leg puzzle (found in printing round 3.2) cut in half with the bottom half on the hint card for emotions.
- A card explaining the rules of a ghost leg puzzle (found in printing round 3.1) Trace the line starting top left to show how it works.
- 4 cups, with each containing another substance in it. Place the key in one of those and place it on the spot of the solution of the ghostleg puzzle.
- Organs Ratio Lego 100 lego pieces in 4 colours. Colours can be different but it has to be this ratio: 10, 20, 30, 40 (Build a pyramid using the lego blocks)
- Combination lock with 4 coloured dots on it corresponding to the colours of the lego blocks.
- Suggested code: 3,1,2,4
- Brain Combination Lock Combination lock (code: 4214)
- Quiz, containing questions about this escape adventure

You can find all the components of this Escape Adventure at: www.lookingatlearning.eu/escapeexclusion/toolkit





Setting up the room.

First gather all of the materials in 3 groups: Round 1, Round 2, Round 3. Now cut out the instructions for the different groups for each round, along with all the other printed materials. Put all the instructions for the puzzles of round 2 and 3 in separate envelopes titled "puzzle instructions (2 / 3)" except for the 3 round cards of the brain.

Divide the room into 4 areas with the area for the brain in the centre. Make sure the Brain has a table to sort all the instructions they will be getting. Keep in mind that pictures and hints will be hidden in the areas of senses and emotions respectively, so make sure there are enough hiding places in these areas. A key will also be hidden in the muscles/bones area. Each area should have a table to lay the puzzles on.

Setting up round 1:



Hide all the pictures, including the four of the slaughterhouse, in the senses' area. Then hang the four silhouettes on the wall with their instructions for round 1.

Muscles/Bones

Shuffle the parts of the sliding puzzle and lay down the instructions next to it.

Emotions

Lay down the Rebus on a table in their area, along with their instructions. Lay down a pen and paper next to this.

Organs

Turn the QR code into a jigsaw puzzle by cutting it up with scissors, then lay the instructions next to it. Provide them with a pen and paper.

Brain

Place the Brain round 1 card on the Brain table. Lay down the envelopes with instructions for the next rounds down on the brain table. Put chains around the chair where the brain will be sitting. Try to either attach these to the chair or hang them up in an area around the brain to emulate the idea of being locked up.





Setting up Round 2:

Senses

Put the lockable box on the table in the senses' area with the last piece of the sliding puzzle inside. Lock the box with the combination lock with the code 5733.

Muscles/Bones

Put the letters for muscles/bones' second puzzle in a separate envelope titled "Letters for Muscles/bones Round 2" and lay this down on the table for the brain.

Emotions

Hide the 9 Hint cards in the Emotions' area.

Organs

But the molecule set or the alternative on the table in Organs' area and put the drawing of adrenaline found in printing round 2.2 upside down next to it.

Brain

Place the Brain round 2 card on the Brain table. Tape the glass jar from Muscles/Bones on the table of the Brain. Attach a magnet to the key for the padlock and put it inside the glass jar.







Setting up Round 3:

Senses

Put the maze for round 3 in the round 3 instructions envelope on the Brain's table. Now hang the directional lock on the chains (or rope) surrounding the Brain facing the Senses' Area.

🍗 Muscles/Bones

Attach the padlock for the Muscles/Bones to the chains surrounding the Brain facing the Muscles/Bones' area. Then hang or place the ring with keys close to the padlock. Now take the correct key for the padlock and hide it somewhere inside Muscles/Bones' area. Then write a hint about the location of the key on the Muscles/Bones hint card for round 3, and put it in an envelope with "Hints round 3" written on it.

Emotions

Set the box on the table in the Emotions' area, then place the top half of the Ghostleg puzzle near the box. Place the hint card with the bottom half of the Ghostleg puzzle in the envelope with "Hints round 3" written on it. Now place the cups with substances inside making sure the key is in the right substance.

Attach the padlock for the key to the chains surrounding the Brain facing the Emotions' area.

Organs

Place the lego pyramid on the Organs' table. Attach the combination lock with coloured dots to the chains surrounding the Brain facing the Organs' area.

Brain

Place the Brain round 3 card on the brain table.

Attach the final combination lock to the chains surrounding the brain.

You're ready to start the adventure!





Project Partners



Asociación Promesas (SPAIN)

Authors: Ruta Kronberga, Nacho Salgado, Esther Bombín, Javi Quilez javi@promesas.eu www.promesas.eu



Colegio La Milagrosa y Santa Florentina (SPAIN)

Authors: Marina Represa, Yaiza Martínez, Inés Aparicio Imsf@Imsf.es www.Imsf.es



Youth Exchange Service (THE NETHERLANDS)

Authors: Gabi Steinprinz, Konstantina Korai, Dani Korai gabstein@gmail.com www.yesnow.nl



V.O. de Vallei (THE NETHERLANDS)

Authors: Inge van Es, Lex Eijt, Taco Ritsema van Eck, Jelle Klijn, Chris van Walraven

info@vodevallei.nl www.vodevallei.nl



Jaunpils municipality (LATVIA)

Authors: leva Zagmane, Jurgis Kuksa, Inga Abula izagmane@gmail.com www.jaunpils.lv



Gulbene municipality (LATVIA)

Authors: Anita Birzniece, Jana Keibeniece, Gunta Gruniere, Zita Grinberga, Vita Mednieve dome@gulvene.lv www.gulbene.lv



Stranaidea S.C.S. (ITALY)

Authors: Chiara Bechis, Marco Fiorito, Marta Sartorio, Katerina Nastopoulou teatrodigiornata@stranaidea.it. www.stranaidea.it



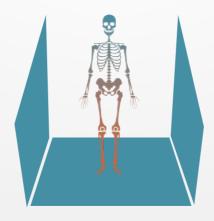




ESCAPE ADVENTURE MODULE

HUMAN PROCESSOR

FORMAT: SPACE DIVIDER





www.lookingatlearning.eu