PERSPECTIVES, OPINIONS AND EMOTIONS

TARGET AUDIENCE 14 to 18 years

SHORT SUMMARY During this lesson, the students explore their own and other people's opinions, perspectives and emotions with regard to the production, consumption and repair of electrical and electronic devices, as well as the impact that their own choices have.

REQUIRED PRIOR KNOWLEDGE Students are familiar with the basic principles and frameworks with regard to dealing sustainably with electrical and electronic devices (design phase, circular economy, R strategies, dormant devices, etc.). Students are able to adopt a particular point of view and formulate arguments ('therefore', 'because', 'given that', etc.).

MODULE 1

Interreg North-West Europe SHAREPAIR
djapo
België partner in ontwikkeling
Vlaanderen verbeelding werkt

PERSPECTIVES, OPINIONS AND EMOTIONS

DURATION ▸ 50 minutes

LEARNING OUTCOMES

- Students are able to form an opinion on the production, consumption and repair of electrical and electronic devices.
- Students are able to provide arguments to support their opinion on the production, consumption and repair of electrical and electronic devices.
- Students explore other perspectives on the production, consumption and repair of electrical and electronic devices.
- Students explore their emotions with regard to the production, consumption and repair of electrical and electronic devices.
- Students have the inner confidence to change their views on the production, consumption and repair of electrical and electronic devices.
- Students understand how their choices with regard to the production, consumption and repair of electrical and electronic devices can contribute to a more circular economy.

MATERIALS REQUIRED

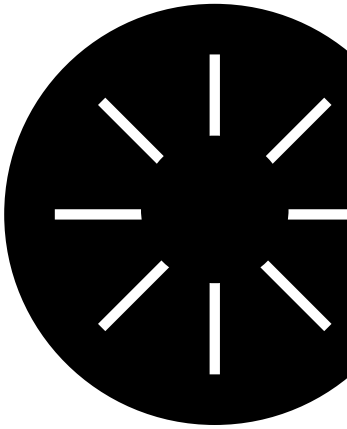
- A whiteboard or flip chart
- Propositions or statements on the repair of electrical and electronic devices (appendix 1)
- Post-its
- A piece of thread
- Stock photos on the production, consumption and repair of electrical and electronic devices (appendix 2)
- Five possible quotations from the people in the stock photos (appendix 3). One quotation per photo.
- 'What if' critical thinking questions on repairing electrical and electronic devices (appendix 4)

TO DO BEFOREHAND

- Read the Background Information document attentively. This text gives you the what, why and how of the subject and the didactic knowledge and insights you need to work with this module.
- Choose those elements from the module that suit your students best and are most compatible with previous and planned lessons.
- Choose one or more propositions (appendix 1) that are likely to interest your students and correspond to their prior knowledge, and write or hang them on the whiteboard or on a flip chart at the beginning of the lesson. Reformulate them if required or draft propositions yourself; if you choose to do this, formulate clearly and unambiguously and avoid vague words such as 'sometimes' and 'perhaps'; also avoid including an argument in the proposition. Create two columns under each proposition, one marked 'agree' and the other 'disagree', and connect the two outer ends with each other by hanging a piece of thread horizontally across the whiteboard or the flip chart.
- Print the five stock photos (appendix 2) and hang them in different places in the classroom or on the whiteboard or flip chart. You can also print the quotations (appendix 3) (without the number of the photographs) as cards.
- Select one or more 'What if' critical thinking questions (appendix 4) that are likely to interest your students and that correspond to their prior knowledge. These critical thinking questions are based on the propositions (appendix 1) and relate to future situations with regard to the consumption and production of electrical and electronic devices, situations that either facilitate or impede the creation of a circular economy. The situations are set in the near or distant future, and are formulated either in specific or in general terms. You could also use critical thinking questions of your own or ask the students to come up with several 'What if' questions themselves on the basis of the propositions (appendix 1).

LESSON PLAN

1 – STIMULUS



Use the *Akkoordkoord (Thread of agreement)*(© Djapo)[1] method to help students reflect on their own views, to support them with arguments and to acquire the inner confidence to change them if need be.

Hand out post-its to the students and read the proposition or propositions you have chosen (appendix 1) aloud. Then ask the students to write down their name on the post-it, as well as one reason why they agree or disagree with the proposition. Their argument must include a short explanation as to why they agree or disagree and an example from their own experience or from a previous lesson that backs this up. Then ask them to stick the post-it on the thread between 'agree' and 'disagree', in a spot depending on whether their opinion is closer to 'agree' or to 'disagree'. Then discuss the positions of the various post-its in class and ask the students to give arguments for their opinions.

Leave the thread and post-its there until the end of the lesson.

TIP MODULE 3

Encourage the students to write any questions they have about the topic on a flip chart. Tell them you will discuss these questions during a future class.

1 ~ *The Akkoordkoord ('Thread of agreement')* method is part of Djapo's *Filosoferen (Doing Philosophy)* method. The students explore their thoughts, ideas and opinions during work methods that help prepare for philosophical conversation. Their thoughts and ideas, and their thinking process as a whole, enrich the ensuing philosophical conversation. Doing philosophy is a thinking skill that you can use to sharpen the students' critical capacity and inspire an active sense of citizenship. It means exploring concepts and values during a philosophical conversation. For more information about doing philosophy, visit www.djapo.be.

2.1 – Who am I?

Use the *Rarara, wie ben ik? (Who am I?)* (© Djapo)[2] method to familiarize students with other people's perspectives and with the habit of putting themselves in other people's position.

Hang the stock photos (appendix 2) in different places in the classroom. Ask the students to go around and look at them. Then read the quotations (appendix 3) aloud one by one.

- Which quotation belongs to which photo? Who could have said what?

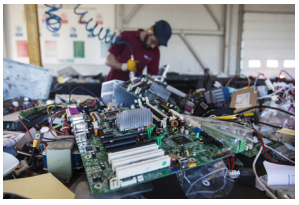
Ask the students to stand near the stock photo with the person who they think might have said the sentence that has just been read. Alternatively, pin the photos to the whiteboard or flip chart and print the quotations on cards. Then ask the students to pin the quotations under the corresponding photo.

Ask a number of students why they are standing where they are and then reflect on their answers.

- Why do you think this person is the best match for this quotation?
- Who agrees with this? Who disagrees? Why?
- Do you think this person has always been a good match for this quotation? Why or why not?
- Where are most or fewest students standing?
- Is there a photo that nobody chose? Why does the quotation not match this person?

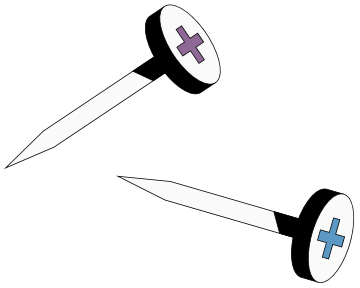
Also reflect on what they see in the photo and, together with the students, explore the connections between the photos.

- Where could the event depicted by the photo be taking place? Why?
- What do you think the person in the photo is doing? Why would they be doing that?
- How do you think the person in the photo feels? Why would this person feel like this?
- What is the connection between what the person in photo 1 is doing and what the person in photo 2 is doing?
- Do you think the person in photo 5 feels the same way as the person in photo 3 …?



2 ~ *The Rarara, wie ben ik? (Who am I?)* method is part of Djapo's *Systeemdenken (Systems Thinking)* method. Systems thinking helps students to explore our complex world by consciously looking for connections. It helps them develop a nuanced perspective on the world, and to remain alert to the various points of view in any story. This helps them to defer judgement before adopting an opinion, and to gain greater insight into complex themes. For more information about systems thinking, visit www.djapo.be.

Visualize the connections by drawing a horizontal arrow or timeline on the whiteboard and pinning the photos and quotations on the arrow or timeline in chronological order. Explain that this represents a linear economy. Then draw a circle or loop on the whiteboard and ask the students to try to pin the photos and quotations on the circle. Explain that the circle or loop represents a circular economy.



- Would the photos and quotations be the same for a circular economy?
- Which photos would look different? Why?
- Which photos would you not be able to take in a circular economy? Why not?
- Which quotations would be different in a circular economy?

TIP MODULE 1

Make connections with the visualizations and explanations on the circular economy from the first lesson. Also ask whether the students recognize any of the R strategies in this chronological series of photos.

DIFFERENTIATION

Alternatively, ask the students in pairs to write a caption or social media post for one of the stock photos.

- Imagine that this photo is going to be posted on Sharepair's Facebook page. What text would you post with it?
- Also think of an appropriate hashtag and choose two emoticons.

The students write down or hang their caption and social media post under the stock photos or under the corresponding number on the whiteboard.

Take out the *Thread of agreement* again. Go over the propositions on the whiteboard and ask the students to imagine what the opinions of the people in the pictures might be.

- Would the person in this photo agree or disagree with this proposition? Why?

Then ask the students to pin the photos and quotations to the *Thread of agreement*, and to explain why they have chosen the spot they have chosen.

- The person in photo 1 would disagree, because …
- The person in photo 2 would agree, because …

2.2 – Route Map

Use the *Routekaart (Route Map)* (© Djapo)[3] method to teach students to inquire into the consequences of a situation and to judge these consequences as either positive or negative.

Write the 'What if' critical thinking questions (appendix 4) you have selected at the top of the whiteboard or flip chart and read them out loud. Then explain that you are going to use the *Route Map* method to find an answer to these critical thinking questions.

TIP

While making the *Route Map*, use language that emphasizes the students' thinking processes. This helps them become aware of these processes, to learn to articulate them and to notice their utility. Use words such as 'cause', 'possible consequence', 'if … then …', 'situation', 'perspectives', etc.

Step 1 – Anticipate consequences

Articulate the baseline situation as a hypothesis. Write the hypothesis in the top left corner under the critical thinking question and draw an empty dot under it.

- Every young person must take a basic repair course.
- Every student gets their own school laptop.
- Electronics manufacturers are banned from producing new smartphones until all existing smartphones have been repaired.
- Consumers are banned from buying a new smartphone unless they hand in an old, faulty and non-repairable smartphone.
- Consumers are banned from owning any electrical or electronic domestic devices, but may only lease them.
- Every newly mined resource will be heavily taxed.
- Every consumer is prepared to pay X percent more for a repairable electrical or electronic device than for a non-repairable electronic device.
- Consumers only buy electrical and electronic products if they can find all the information about the production process on the manufacturer's website.

DIFFERENTIATION

Alternatively, divide the students into groups and ask each group to select a critical thinking question. Make sure there is a clear structure by asking each group to follow the various steps, monitor progress by timing each step using an alarm, and discuss the critical thinking questions for every step in the class. This is a way for the students to carry out the exercise step by step themselves.

Ask the students to reflect on whether they think at the current time that the event in question is positive or negative.

Ask the students to reflect on possible consequences of the baseline situation. Guide them through this process by asking questions.

- What if …?
- What could the possible consequences be of … ?
- If …, then … ?
- What do you think would happen if …?
- What do you think it would mean if … ?

3 ~ *The Routekaart (Route Map)* is a visual reasoning instrument developed by Djapo, which also helps students to practise systems thinking. Visual reasoning instruments help to visualize your thinking and enable others to join in your thinking process. Systems thinking helps students to explore our complex world. It helps them develop a nuanced perspective on the world, a perspective which is alert to the various points of view in any story. Systems thinkers think about problems in as many ways as possible, are open to continuing to inquire into reality and are prepared to change their point of view. For more information about visual reasoning instruments and systems thinking, visit www.djapo.be.

Write down the consequence to the right of the hypothesis and draw an empty dot under it.

› For example, for the hypothesis 'Consumers are banned from owning any electrical or electronic devices, but may only lease them':
› Manufacturers can't sell any products anymore, only lease them out.
› And for the hypothesis 'Consumers only buy electrical and electronic products if they can find all the information about the production process on the manufacturer's website':
› Manufacturers will be as transparent as possible about the production process on their website.

If the students come up with multiple consequences, split the line into a 'fork' and list the consequences below each other. Leave sufficient space between the direct consequences for further bifurcations.

Ask the students to look at a possible consequence and come up with new consequences of this first consequence. Encourage them to think on the basis of the new situation, not of the baseline situation.

› If you look at this consequence, what could a further possible consequence be?
› What if … ?
› If …, then … ?

Write down every consequence to the right of the cause and draw an empty dot under it.

› For example, for the hypothesis 'Manufacturers can't sell any products anymore, only lease them out':
› Manufacturers will only make devices that have longer lifespans and are easier to repair.
› And for the hypothesis 'Manufacturers will be as transparent as possible about the production process on their website':
› Manufacturers will do their best to prevent types of mining and production etc. that pollute the environment and are degrading for human beings.

If the same cause has multiple consequences, split the line further. For example, for the hypothesis 'Manufacturers can't sell any products anymore, only lease them out':
Consumers are dependent on the rental prices set by the manufacturers.

DIFFERENTIATION

Consequences differ depending on the standpoint from which you view the issue. You can broaden the inquiry by actively articulating different perspectives, for instance:

› What would this mean for you or me?
› What would this mean for an African mine worker?
› What would this mean for an employee in a phone shop?
› What would this mean for the CEO of an electronics manufacturer?

DIFFERENTIATION

If any consequences are mentioned that are untrue or doubtful, put a question mark behind them and encourage the students to think about them further afterwards.

Step 2 – Judging consequences

Go over the consequences that the students have mapped together in class.

Ask them to judge every consequence either positively or negatively. Also ask for arguments to support their judgement, to encourage them to reflect more deeply on their judgement. There is no need to resolve conflicting judgements between students.

Colour the empty dot below any consequences that are judged positively green. Colour the dot below any consequences that are judged negatively red. If opinion is divided or if the consequence can be judged both positively and negatively, then colour the dot half red and half green.

Do you think this consequence is positive or negative? Why?
Do you think this consequence is good or bad? Why?

Then ask the students to think about the baseline situation again and whether they judge that event positively or negatively now that they have considered all the possible consequences. Ask them to share the outcome with the group.

- Now you have considered all the possible consequences, what do you think about the initial situation?
- How did you judge or assess the initial situation at the start?
- Has your opinion about the initial situation changed since then? Why or why not? Discuss.

What if electronics manufacturers were banned from producing new smartphones until all existing smartphones have been repaired?

Consumers are banned from owning any electrical or electronic domestic appliances, but may only lease them.

Manufacturers can't sell any products anymore, only lease them out.

Manufacturers will only make appliances that have longer lifespans and are easier to repair.

Consumers are dependent on the rental prices set by the manufacturers.

Step 3 – Judging the result

Ask the students to look at the result and explain what they think about it.

- Are you satisfied with the result?
- Did any consequences surprise you?
- Are there consequences you did not expect?
- Did the exercise give you a clearer picture of the situation?

Step 4 – Reflecting on the thinking process

With the whole group, go over the steps the students took and ask about their experiences with regard to their thinking process.

- We began with a critical thinking question. How did this question affect you?
- Was it easy to think of consequences? Why?
- How did it make you feel to hear the consequences suggested by the other students?
- What happened when you had to think about the consequences of consequences?
- How did judging the consequences go? Why?

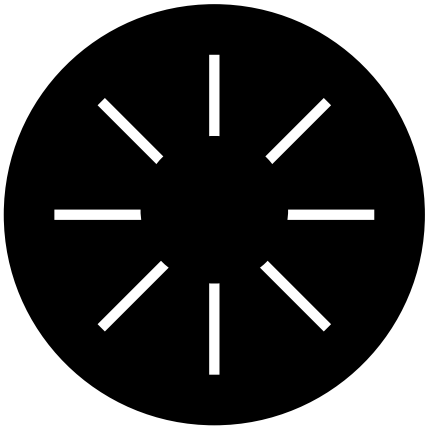
TIP MODULE 5

Leave the *Route Map* where it is or keep the flip chart page or the whiteboard diagram for a later lesson. Use it to test things that come up in other modules against positive and negative scenarios in the *Route Map*, for example in module 5:

- What positive consequences in our *Route Map* could our activity contribute to?
- Could our action also have negative, undesired consequences?

3 – CONCLUSION

Take out the *Thread of agreement* again and tell the students they can move their post-its to a different place if they wish. This is a way for them to confirm or change their opinion.



Reflect in the whole group about changing opinions.

- Who has changed their opinion? Why? Who hasn't? Why not?
- Is it difficult to change your view? Why?
- What do you need before you can form your opinion?

Explain that it is important to have the inner confidence to change your initial point of view. Your perspective on the world can change as you receive new information. This also means your opinions may change over time. Discuss this.

- We have examined our own and other people's perspectives. How did that make you feel? What insights has this given us?

Every young person must take a basic repair course.	**Every student must be given their own school laptop.**	**Electronics manufacturers are banned from producing new smartphones until all existing smartphones have been repaired.**
Consumers are banned from buying a new smartphone unless they hand in an old, faulty and non-repairable smartphone.	**Consumers are banned from owning any electrical or electronic domestic devices but may only lease them.**	**Every newly mined resource must be heavily taxed.**
I am prepared to pay twenty percent more for a repairable electrical or electronic device than for a non-repairable device.	**I only buy electrical and electronic products if I can find all information about the production process on the manufacturer's website.**	

APPENDIX 2

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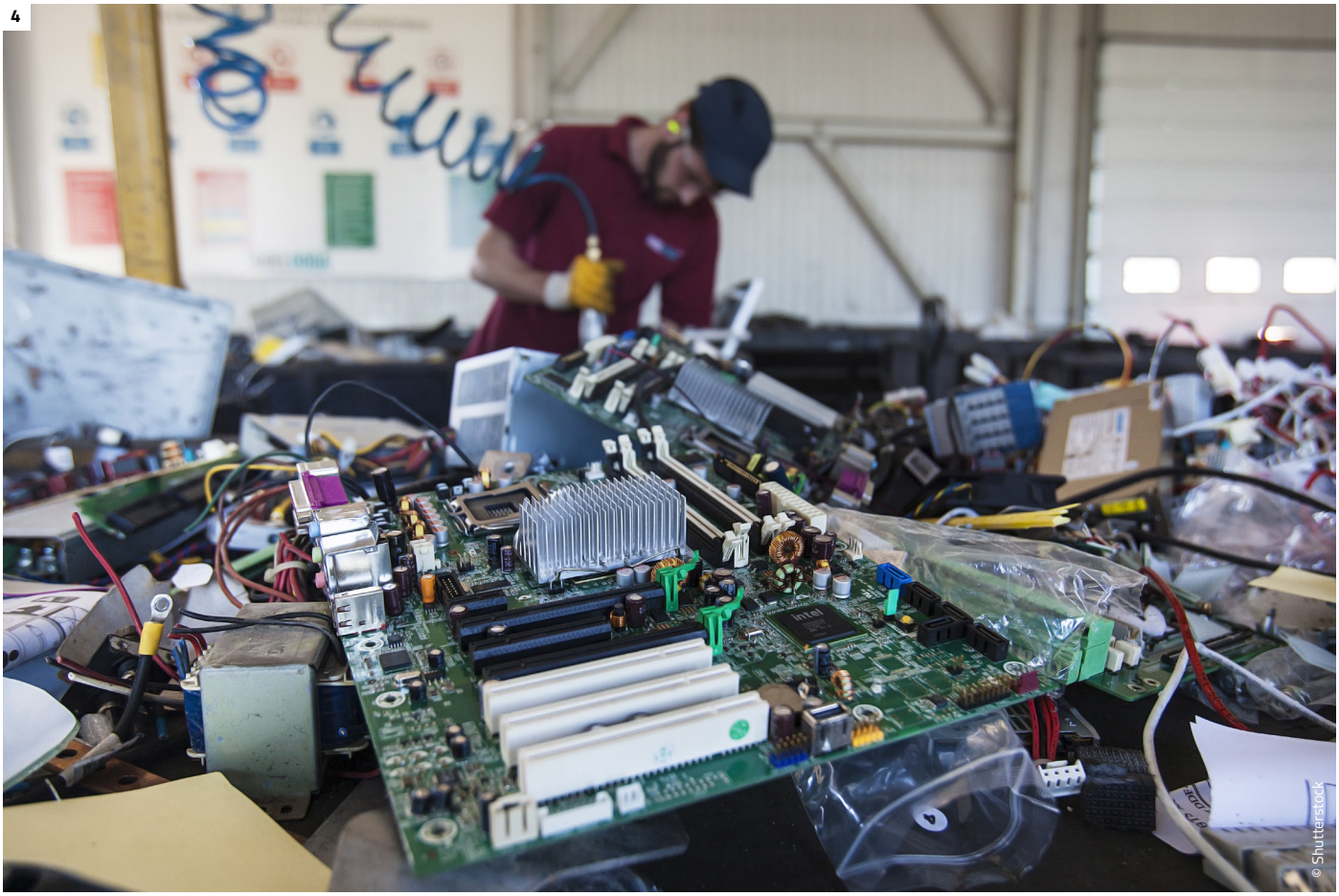

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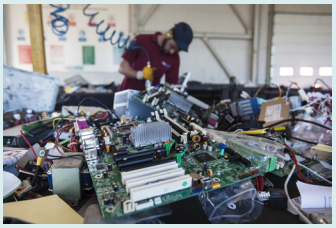
APPENDIX 3

I know my job is unsafe, unhealthy and badly paid, but this is the only paid work I can find near my home. Because of the work I do, people on the other side of the world can buy a new smartphone.

It gives me a lot of satisfaction to repair a device myself. I don't have all the tools I need at home, but you can do a lot even with a simple screwdriver. I sometimes watch a 'how to' video on YouTube, but I've been repairing products for a while now and notice I'm getting better at it.

The nearest recycling centre is a bit of a drive, but I'm glad the materials in my old devices will get a new destination. I've thought about using these devices for longer and repairing the broken ones, but the new models on the market now are much more energy-efficient.



Every day I recover the most valuable materials from discarded devices. We have so many of them, I sometimes wonder where they all come from. The parts I take out are recycled or reused as part of a new device. The remaining material is thrown into big containers. I don't know where they are shipped.

I moved from the countryside to this neighbourhood in the outskirts of the city. Just like thousands of other people, I come here every day to find valuable materials. I miss the countryside and am ill a lot of the time, but I make more money doing this than I did in agriculture.

What if every young person must take a basic repair course?	**What if every student were given their own school laptop?**	**What if electronics manufacturers were banned from producing new smartphones until all existing smartphones have been repaired?**
What if consumers were banned from buying a new smartphone unless they hand in an old, broken and non-repairable smartphone?	**What if consumers were banned from owning electrical or electronic domestic devices, but may only lease them?**	**What if every newly mined resource were heavily taxed?**
What if all consumers were prepared to pay X percent more for a repairable electrical or electronic device than for a non-repairable device?	**What if all consumers were only to buy electrical and electronic products if they could find all the information about the production process on the manufacturer's website?**	

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