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Theme

Life and career competences

Duration

60-90 minutes

Level

Advanced

Computational Thinking Steps Used

☑Decomposition
☑ Pattern recognition
☑ Abstraction
☑ Algorithmic thinking

LEARNING BOX OF UNPLUGGED ACTIVITIES

"Car or Public Transport?" – Making Smart Travel Choices

In this activity, participants explore everyday travel situations and decide whether to use a car or public transport. They compare options, discuss their choices, and justify their decisions. Through group discussion and simple rule-based thinking, they learn how different factors influence travel decisions. By the end, they feel more confident choosing sustainable transport options.

Target Group

☑ Low-skilled adults with low digital competences
☑ Low-skilled adults with limited formal education or qualifications
☑ Low-skilled adults with low participation in lifelong learning/training opportunities

Learning Objectives

- To apply CT principles working in small groups
- To learn how to break down a travel situation into simple steps.
- To learn to compare car and public transport using key factors.
- To identify what matters most when choosing transport.
- To create simple rules to support decision-making.
- To explain and justify their decision

Competence Areas

a) Innovation Competences

☐ Creativity
☑ Critical thinking
☐ Problem solving
☑ Communication
☑ Collaboration

b) Information Literacy Competences

Methodological Approach

☑ Gamification
☑ Challenge-Based Learning
☑ Collaborative learning
☐ Experiential learning

- ☑ Ability to access, understand, and critically analyse information
- ☑ Interpretation of digital and visual content
- ☐ Awareness of media influence and biases

c) Life and Career Competences

- ☑ Flexibility and adaptability
- ☑ Initiative and autonomy
- ☐ Sociability and intercultural competence
- ☐ Productivity
- ☐ Leadership and responsibility

Learning Outcomes

By the end of the activity, participants will be able to:

- Break down a travel situation into steps;
- Identify key decision factors;
- Compare transport options;
- Create simple decision rules;
- Explain and defend their choices.

Notes

- Use simple, familiar travel situations.
- Encourage movement and discussion.
- Keep language clear and slow.
- Allow different opinions.
- Focus on real-life application.

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"Car or Public Transport?" – Making Smart Travel Choices

Step 1. Decomposition

Gamification: each group gets a different scenario (mission) (Appendix 1, 2, 3):

- "Going to the doctor"
- "Visiting family"
- "Going shopping"

Adult learners are asked to:

- Break the mission into steps (start → travel → destination);
- Identify what you will need in this situation (time, costs, comfort).

Facilitator support

- The facilitator may ask: "What do you need to consider before travelling?"

This step helps participants break down a travel situation into clear and manageable parts, making it easier to understand how travel decisions are structured.

Step 2. Pattern Recognition

Groups compare car vs public transport.

Adult learners are asked to:

- Identify common factors such as costs, time, comfort, and environmental impact.
- Recognise patterns (e.g., car = faster, bus = cheaper)

Gamification:
Participants move to different places in the room:
To the left go these adults who prefer to go by car;
To the right, there are these adults who prefer to use public transport.

Facilitator support:

- The facilitator may ask: "What do people usually choose and why?"

This step helps participants recognise patterns in transport choices, making it easier to compare options in different situations.

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Step 3. Abstraction

Groups prioritise.

Adult learners are asked to:

- Choose 2–3 key factors
- Ignore less important ones
- Agree as a group

Gamification:
Groups must agree on one main priority and explain it.

Facilitator support:

- Ask: “What matters most for your decision?”

This step helps participants focus on the most important factors, making it easier to simplify and improve decision-making

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Step 4: Decision Making Strategy and Debate (Algorithmic Thinking)

Groups create a simple rule-based decision-making strategy and visualise it.

They should:

•Define simple rules, for example:

“If time is very important → choose car”

“If cost is important → choose public transport”

“If environment matters → avoid car”

• Create a step-by-step process:

1. Understand the situation
2. Identify priorities
3. Compare options
4. Choose

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Integrated Debate

Each group presents its decision (car or public transport) and explains its rules.
Other groups:

- Ask questions;
- Challenge the decision;
- Compare different strategies.

Gamification
Participants vote for:

- Best argument
- Most sustainable solution
- Most practical choice

Facilitator support

- Facilitator may ask: "Would this work in real life?";
- Encourage discussion and different opinions.

This step helps participants create a structured decision process and understand how rules and reasoning guide real-life choices

Appendix 1

Mission 1: Going to the Doctor

You have a doctor's appointment at 10:00. The clinic is eight kilometres from your home. Travelling by car is faster, but parking near the clinic is limited and costs money. Travelling by bus takes longer and requires a short walk from the bus stop.

Your mission: Break down the journey into steps and identify what should be considered before choosing a transport option.

Appendix 2

Mission 2: Visiting Family

You plan to visit a family member who lives 60 kilometers away. You would like to stay for several hours and return home in the evening. Travelling by car offers greater flexibility, while public transport is less expensive but follows a fixed timetable.

Your mission: Analyse the journey and determine what information is needed to make a suitable travel decision.

Appendix 3

Mission 3: Going Shopping

You need to buy groceries for the week. The supermarket is four kilometres from your home. The bus stops close to the shop, but you may need to carry several heavy bags. Travelling by car may be more comfortable, although traffic and parking could cause delays.

Your mission: Divide the journey into clear stages and identify the factors that could affect your choice.