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This project has been co-financed with support from the European Commission's ERASMUS+ programme. This publication reflects only the views of its authors, and neither the European Commission nor SEPIE can be held responsible for any use that may be made of the information contained herein.

Theme

Life and career competences

Duration

60-90 minutes

Level

Advanced

Computational Thinking Principles Used

☑Decomposition
☐ Pattern recognition
☐ Abstraction
☑ Algorithmic thinking

LEARNING BOX OF UNPLUGGED ACTIVITIES

Lost and Found Challenge: Recovering a Phone at a Large Airport

This activity helps adult learners practise structured problem-solving in a stressful travel situation. Participants are presented with a scenario in which a mobile phone containing boarding passes and other important information has been lost after the security check. They reconstruct the traveller's route through locations such as restrooms, duty-free shops, restaurants, and seating areas. During the task, adult learners apply such CT principles as decomposition and algorithmic thinking to identify possible actions and organise them in a logical sequence. By the end of the activity, learners should be able to respond to a lost-phone situation in a calm, logical, safe, and organised manner.

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

Adult learners develop skills on how to:

- Break down a lost-item situation into smaller and manageable tasks;
- Identify the most likely places where the phone may have been lost;
- Organise actions in a logical order;
- Distinguish between immediate, secondary, and preventive actions;
- Create a clear algorithm for phone search;
- Create clear alghorithm if the phone was not found (protect personal and financial information).

Competence Areas

a) Innovation Competences

☑ Creativity
☑ Critical thinking
☑ Problem solving
☑ Communication

Methodological Approach

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

☑ Collaboration

b) Information Literacy Competences

☑ 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, adult learners will be able to:

- Break down the problem of losing a mobile phone at an airport into smaller and manageable tasks;
- Reconstruct their journey and identify the most likely places where the phone may have been lost;
- Organise search actions in a clear and logical sequence;
- Distinguish between actions related to finding the phone, boarding the flight, and protecting personal information;
- Apply simple “if–then” rules when deciding what to do next;
- Create a clear algorithm for phone search;
- Create a clear algorithm if the phone was not found (protect personal and financial information).

Notes

- Provide adult learners with coloured sticky notes, pens, and a large sheet of paper.
- Present the airport scenario calmly and use simple, familiar language.
- Use a simple airport map and ask adult learners to mark the route from security to the departure gate.
- Encourage adult learners to explain why they selected a particular search order.
- Emphasise that retracing the route should be systematic rather than random.

- Remind adult learners not to enter restricted areas or confront another person who may have the phone; airport staff or security should be asked for assistance.
- Highlight the importance of keeping identification documents, booking references, emergency contact numbers, and essential travel information available separately from the mobile phone.

COMPUTATIONAL SENIORS

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Step 1. Decomposition

The facilitator presents the challenge to adult learners (Appendix 1). The challenge focuses on the situation of losing a mobile phone at an airport.

Facilitator suggest to choose one person from the group who has lost his phone and to imagine in which place it happened.

Challenge for group members to help to find the phone.

The facilitator asks adult learners to divide the situation into separate problem areas and provide an airport map (Appendix 2).

Facilitator may help suggest to think about:

1. Reconstructing the Journey

   Adult learners identify all places they visited after the last confirmed moment when they had the phone.

   For example:

   - Security-check area;
   - Seating area after security;
   - Duty-free shop;
   - Restaurant.
2. Arranging the locations in chronological order.
3. Identifying immediate needs: flight number and departure time; boarding gate; boarding pass and etc.
4. Searching for the phone

   Adult learners identify actions that can help locate the phone: check pockets, bags, clothing, and hand luggage and etc.

   Protecting personal information

   Adult learners consider what should be done if the phone is not found immediately.
5. Continuing the Journey

   If a person didn't find the phone, how can he/she could continue the journey?

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Facilitator support

The facilitator may ask: “When did you last see the phone?”, “Where did you go after the security check?”, “Which place should you check first?”

The activity helps adult learners break down a stressful situation into manageable tasks and create a clear step-by-step response plan.

Step 2. Algorithmic Thinking

The facilitator invites adult learners to create and visualise two simple algorithms.

The first algorithm should show the search process when the phone is eventually found.

The second algorithm should explain what the traveller should do when the phone cannot be found.

Adult learners may visualise the algorithms as flowcharts using action boxes, arrows, and Yes/No decision points.

Algorithm 1: Searching for the Phone

1. Go to the restroom where you may have left the phone.
2. Search the area carefully.
3. Ask: “Have you found the phone?”
4. If yes, confirm that it is your phone and end the search.
5. If no, continue to the next location you visited.
6. Go to the duty-free shop.
7. Ask a staff member: “Have you seen or found my phone?”
8. If yes, describe the phone, confirm that it belongs to you, collect it, and end the search.
9. If no, continue searching at the next location, such as the restaurant, seating area, or departure gate.
10. Repeat the same Yes/No decision process at each location until the phone is found or all relevant locations have been checked.

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Adult learners work in groups. They receive small coloured sticky notes and use them to visualise the step-by-step algorithm. Each note represents one action or decision point. Adult learners arrange the notes in a logical order, connect them with arrows, and use Yes/No branches to show what should happen next.

Gamification Element

After presenting the algorithms, the groups vote for the best.

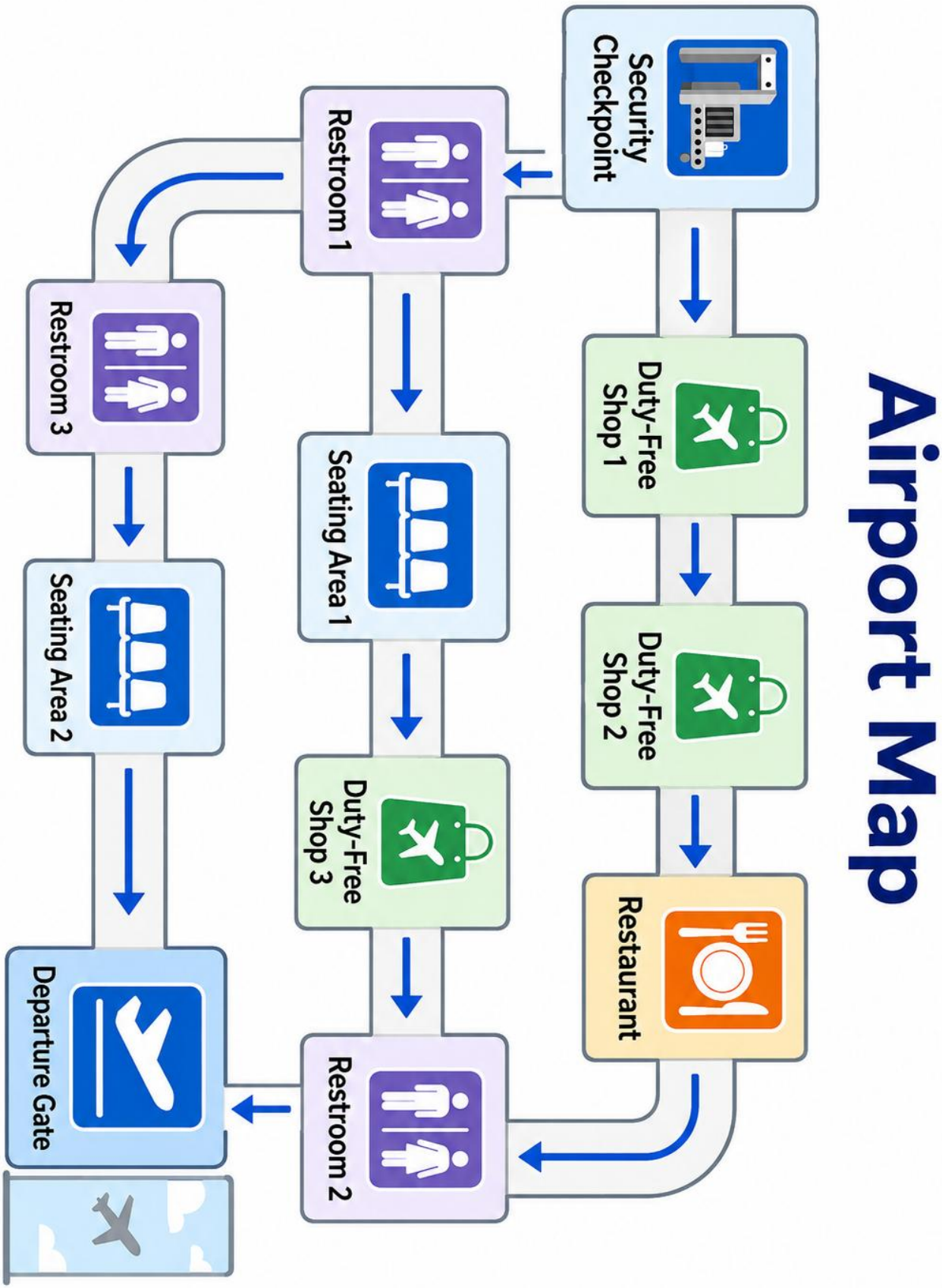
Facilitator support

The facilitator may ask: “What should you do when the answer is ‘No’?” “How many locations should you check before contacting lost and found?”

The facilitator should emphasise that adult learners may propose different search routes, provided that their algorithms are safe, logical, and clearly organised.

Challenge

“You and your friend are going through a large airport. After passing through the security check, you visit one duty-free shop, a restaurant, then one more duty-free shop, and a restroom. Later, you discover that your mobile phone is missing. The phone contains your flight information, digital boarding pass, payment cards, banking applications, travel documents, and other important personal information. Without access to the phone, you may not be able to board the plane. You remember having the phone immediately after the security check, but you do not know where you lost it. What should you do?”


Airport Map
Security Checkpoint
Duty-Free Shop 1
Duty-Free Shop 2
Restaurant
Restroom 1
Seating Area 1
Duty-Free Shop 3
Restroom 2
Restroom 3
Seating Area 2
Departure Gate