

Modern and Sustainable Community Service

## **Keywords:**

post office, logistics, communication, parcel delivery, digitalisation, sustainability, innovation

# Target group:

primary school pupils (ages 6-11)



## **Objectives:**

This activity helps pupils understand the role of the post office as more than just a place to send letters — it is a community service that can be reimagined to meet modern needs while caring for the environment. Pupils design and build a model of a sustainable, modernised post office that integrates green technologies, digital tools, and community features, exploring how infrastructure can evolve in smart and ecofriendly ways.

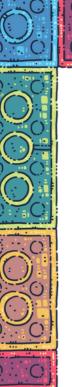
## **General Guideline on Time Allocation:**

The duration needed to carry out this activity may vary depending on the specific group of children. Teachers are encouraged to adapt the implementation according to the needs, interests, and dynamics of the group.

In the preparatory phase, teachers may use a variety of activities to introduce and contextualize the chosen topic. These can include discussions, videos, drawings, storytelling, or even a field trip, depending on the age and background knowledge of the children.

The main construction phase, during which children plan and build their urban element using LEGO bricks, should typically not exceed 45 to 60 minutes. However, this phase often stimulates further curiosity and questions among the children, potentially leading to extended engagement or follow-up activities. For more detailed instructions and pedagogical support on how to implement activities of INNO-kids project, please download the Teacher's Methodological Guide.







- LEGO bricks of various types
- Recycled materials: cardboard, boxes, toilet rolls, bottle caps
- Coloured paper, glue, scissors, markers
- Paper strips or small envelopes as mock parcels and letters
- Printed icons or labels (QR codes, solar panels, package lockers, drones)

Note: Encourage pupils to repurpose available materials creatively. If LEGO bricks are not available, pupils may use basic craft supplies to bring their ideas to life through drawings and handmade models.

### Introduction:

Ask pupils:

- How we can send or receive a letter or parcel?
- What are some of the challenges of traditional post offices?

Guide the discussion toward these points:

- Not cost-effective: Maintaining large, underused buildings and manual systems can be expensive
- Space-intensive: Traditional post offices often occupy more space than needed, especially with fewer people sending letters
- Energy use: While drones and automation may require energy, they can reduce the need for heating, lighting, and maintaining oversized buildings
- Customer delays and inefficiency: Waiting in long queues or dealing with limited opening hours
- Waste: Excess packaging, single-use materials, and paper receipts Introduce the task:

"You are now designers of a new kind of post office — one that works better for people and for the planet. How can you make it faster, greener, smarter, and more welcoming?"

### **Procedure:**

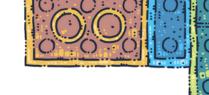
### **Preparation**

Pupils discuss what features a modern sustainable post office could include. Encourage them to brainstorm innovations such as:

- Self-service kiosks to avoid paper receipts
- Solar panels and green roofs to save energy
- Automated parcel lockers that reduce waiting time
- Electric bikes and delivery drones for last-mile delivery
- Digital queues (via app) to reduce crowds
- Reuse corners (e.g. leaving the packaging at reuse station)
- Shared space for community announcements or quiet reading







### Construction

Using available materials, pupils build a miniature post office model with:

- Functional zones: mailing counter, parcel pickup, sorting area
- Eco-features: solar panels, green roof, bike racks, recycling stations
- Smart features: digital screens, parcel lockers, service robots or drones
- Community space: bulletin board, café corner

Let pupils decorate the space with signs, logos, arrows, and labels that explain what each part does and why it's helpful.

#### **Details**

Pupils now reflect:

- How does the building save energy and materials?
- How does it make services easier and faster for people?
- How is it welcoming and inclusive?

They may add:

- LED-style paper lights
- An app symbol to simulate e-parcel tracking
- Drop-off boxes for reusable envelopes
- A "no plastics" zone for packaging
- Braille signs or multilingual labels

#### **Stories**

Each group writes a short scenario:

- A girl picks up a parcel without queueing, thanks to a smart locker
- A delivery worker recharges an e-bike at the solar station
- A neighbour uses the post office to share a poster about a lost cat
- A child sends a birthday card using only reused materials

Stories highlight user experience, innovation, and community spirit.

#### **Presentation**

Groups present their modern post office model. They explain:

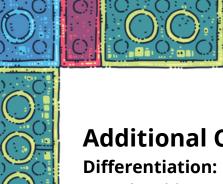
- What functions it includes
- What makes it green and accessible
- How it differs from a traditional post office

## Tips:

Ask pupils:

- "Would you enjoy visiting this post office?"
- "What problem does your design solve?"
- "How do digital tools help us use fewer materials?"









## **Additional Considerations:**

Provide additional support or simplified instructions for pupils who may require extra assistance. For advanced pupils, offer extension tasks such as researching further sustainable practices or designing more complex models.

### **Assessment:**

Assess pupils based on their participation and engagement during discussions and hands-on activities. Evaluate the creativity, effort, collaboration, depth of understanding demonstrated in their models, critical thinking, ability to provide constructive feedback and presentation skills.

#### **Extension Activities:**

- Interview a postal worker or delivery person
- Write a letter to the "Postmaster of the Future"
- Compare postal services in different countries

### **Curriculum Connections:**

This activity integrates:

Civic Education (understanding public services, roles in community)
Social Studies (logistics, urban infrastructure, digital transformation)
Art (design, creativity, construction)
Language (storytelling, discussion, presentation skills)

### **SDG Connections:**

- **SDG 9:** Industry, Innovation and Infrastructure Pupils redesign critical services with smart solutions
- **SDG 11:** Sustainable Cities and Communities Pupils propose post offices that are clean, efficient, and people-friendly
- SDG 12: Responsible Consumption and Production Pupils reuse packaging, reduce waste, and rethink materials
- SDG 13: Climate Action Pupils reduce emissions by proposing green mobility and energy-saving systems





