Ages: 9-11

Design a better bus stop

75 min · indoors · all year round



Prep:

- Cardboard base, 40 × 40 cm
- Cardboard and boxes - 5-6 pieces
- Paper, pencils and masking tape
- Toy passengers - 3: one without luggage, one with a bag and one with a pushchair
- A4 sheet - for scenarios and obstacles

Step by step (~75 min):

1. Write down the three passengers and three conditions: rain, heat and a heavy bag.
2. Before building, ask: what does someone waiting ten minutes for a bus in the rain need? The answers are design requirements, not decorations.
3. Build the model with a roof, a bench, standing space and an approach from the pavement. Use tape so you can still move the pieces.
4. Move each passenger from the pavement to the waiting area. Mark an X on the model wherever they cannot get through, get wet or have nowhere to stand.
5. Fix the obstacle that appears most often and repeat the same test. Add an arrow showing who benefits.

If it’s not working: If the model becomes just a decoration, go back to one passenger and one weather scenario. Every new feature should remove a specific obstacle.

Playing together: A child aged 6-8 builds the shelter and path; a child aged 9-11 sets the scenarios and improves the model; an older child plays different passengers and checks accessibility.

Make it your own: Design for someone with a pushchair, a tourist who does not know the language or a passenger travelling at night. Limit yourselves to ten parts.

Let’s talk:

- "Which feature helps several people at once?"
- "What looks good in the model but solves no problem?"
- "Who has the hardest time at this stop?"

Why try this:

Your child considers different people’s needs, turns them into design requirements and tests a solution with a model. Making changes becomes part of developing the idea.