Goals

Pedagogical professionals

Raise awareness
They themselves use many AI-controlled devices.

Recognize and clarify differences
Differences between robots or AI-controlled devices and humans.

Create educational activities
Create play and educational activities to differentiate between humans and machines.

Understand the enthusiasm of children
For robots and other technological devices

Children

Developing awareness
There are robots and AI-controlled devices in their everyday life.

Recognize differences
Between humans and AI controlled devices

Clarify differences
Children can name the differences between AI and them

Exercise

Level

Recognizing robots

Materials

Images
Animals, Tools, Humans, technical devices, vacuum cleaner, smartphone, etc

2 Boxes (or more)

Preparation
First place all the pictures face down on the floor. Have two cardboard boxes ready. Label the boxes with the pictures, one box with a picture of animals and one box with a picture of robots. Place the boxes in opposite corners of the room. The room is now ready for playing.

Implementation
One child at a time chooses a picture and has to sort it into the correct box. Continue until all of the pictures on the floor are sorted. Discuss with the children why you put which picture card in which box. This can be done during the activity or afterwards.

Variation
1. Put on some music. When you stop the music, each child takes a picture and puts it in the corresponding box.
2. Set up multiple boxes to offer more opportunities for differentiation.
3. Make a grid on the floor using chalk or masking tape, etc. Use a robot (beebot, bluebot, etc.) to sort out the pictures with it.

Tips for in-depths study

Literature

„Hello Ruby – Wenn Roboter zur Schule gehen“
by Linda Luikas

„Hello Ruby – Journey inside the computer“
by Linda Luikas

Imprint

Toolbox #2 was created in 2022 by Ulrike Stadler-Altmann, Susanne Schumacher, Michael Højbjerg, Mia Lind, Karen Sterling, Michelle Kjær Vennekilde, Paulina Landtved.

VYTAUTAS MAGNUS UNIVERSITY
unibz Fakultät für Bildungswissenschaften Facoltà di Scienze della Formazione Facultà de Scienzes dla Formazion Brixen Bressanone Persenon
Børneinstitution Holluf Pile - Tingkær
KLAX

Co-funded by the Erasmus+ Programme of the European Union

The European Commission´s support for the production of this publication does not constitute an endorsement of the contents which reflect views only of the authors. The commission cannot be held responsible for any use which may be made of the information contained therein.

This work is licensed under Attribution-NonCommercial-ShareAlike 4.0 International: https://creativecommons.org/licenses/by-nc-sa/4.0/

www.im-not-a-robot.eu

I‘m not a Robot

Toolbox #2

Who can recognize a robot?

Introduction

What is this about?

How do children recognize a robot? What do children identify as something technical? Children learn through the games and with the materials in the toolbox.

How they can recognize robots and AI-controlled devices in their everyday life. The educators support the children in thinking about the differences between robots/AI-controlled devices and humans.

Children‘s point of view

Questions from Children

Do you recognize a robot when you see one?
Would a robot recognize you?
Where does the robot live?
What is a robot?
What does a robot look like? Does a robot have legs, arms, hands, etc.?
What can a robot do?
How can a robot move?

What we know

Robots and AI-controlled devices are already part of our daily lives. Children of all ages encounter them in their everyday lives all the time and may not even realize that they are using a robot or an AI-controlled device. Often, even we adults are not aware if and how much AI is hidden in our everyday objects.
But we do know that a human has to switch on the robot or AI-controlled device in order for it to work - although some-times timers are used and then the robots start automati-cally.

Examples of robots in everyday life

- Refrigerators
- cars
- hoovers
- computers
- smartphones
- video game consoles
- and much more

Exercise

Level

Robot treasure hunt

Materials

1 Digital camera or more
Smartphone, tablet

Implementation

Go on a robot treasure hunt with the children. Search and find ro-bots with the children in the kindergarten or during a walk in the neighborhood. Everything that appears to the children as a robot is photographed.

During the walk and the photographing, discuss the corresponding questions with the children

Do you recognize a robot when you see one?
Would a robot recognize you?
Where does the robot live?
What is a robot?
What does a robot look like? Does a robot have legs, arms, hands, etc.?
What can a robot do?
How can a robot move?

Variation

The children take photos alone of all the robots they find. They then look at the photos together in the group and discuss what a robot is.

Exercise

Level

Humans turn into robots

Materials

Someone who would like to play a robot

Images
Animals, Tools, Humans, technical devices, vacuum cleaner, smartphone, etc

2 Boxes (or more)

Chalk or masking tape
to make a grid on the floor

Preparation

Make a grid on the floor using chalk, masking tape etc. Place the pictures in the grid faced up. Label the boxes with the pictures, one box with a picture of animals and one box with a picture of robots. Place the boxes in opposite sides of the grid. The room is now ready for playing. Briefly discuss with the children and the adults why a robot needs commands.

Implementation

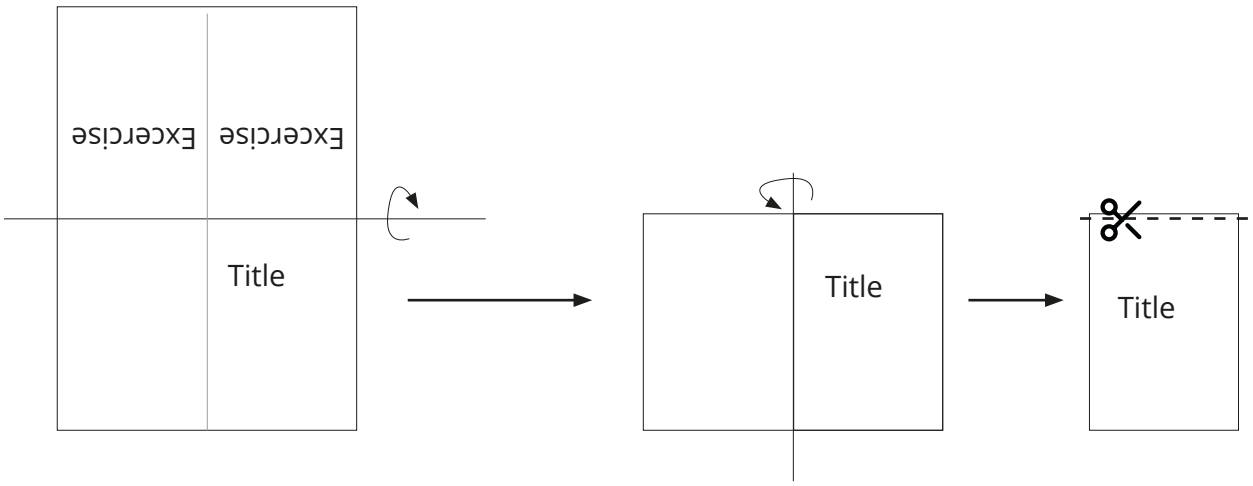
The children now program the “robot” by saying simple com-mands out loud. Simple commands could be:
Pick up the picture! / Walk three steps! / Put the picture down

The first few times you play this game it might make sense the adult is playing the role of the robot to demonstrate how the robot only moves when it is coded. It is important that the adults really only do what the children tell them to do, i.e. really turn into robots. When the children understand the game the children can start coding each other. The aim is for the “robots” to sort the pictures in the correct boxes.

Variation

You can use command cards with symbols, commanding the robot.

Instruction

Print front and back on one sheet. (Turned over long side)

Fold