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THE WALK OF THE DISTRACTED CHILD
GIOVANNINO GOES FOR A WALK (T1)

S5 T1 D3 L1 P3

Focus on:
- Spatial orientation (D3)

Task1: What does the environment of the story look like?
Students create elements of the environment.
Every solution is good!
Any kind of tool and material can be used!
You can use the ideas and the list of materials from the Idea Bazaar, use your own ideas or just let the children to solve the problem using their creativity.

Idea Bazaar – some ideas:
- Building environment out of ArTeC Blocks (I1)
- Building environment out of recycled materials
- Drawing/tinkering
- Creating computer graphics

For details of the different solutions, see the Idea sheets!

Developmental fields:

In focus:
- Fine motor skills
- Spatial orientation
- Creativity

In addition:
- Attention concentration
- Subject concentration – Natural Sciences
- Talent development

Task2: What does a character with mobile/missing limbs look like?

Students create a human figure with mobile/missing limbs.
Every solution is good!
Any kind of tool and material can be used!
You can use the ideas and the list of materials from the Idea Bazaar, use your own ideas or just let the children to solve the problem using their creativity.

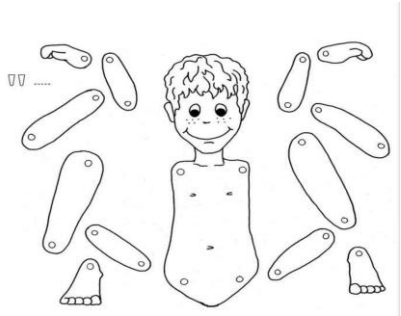
Idea Bazaar – some ideas:
- Building a character out of ArTeC Blocks
- Cutting and binding a cardboard charatcter (I2)
- Drawing series
- Animation editor/Paint/

For details of the different solutions, see the Idea sheets!

Developmental fields:

In focus:
- Fine motor skills
- Spatial orientation
- Creativity

In addition:
- Attention concentration
- Subject concentration – Drawing, IT
- Talent development



How to manage output:

Hang the pictures on the wall, on a big poster, and ask the children to arrange them according to a rule they decide.
Store the objects in a wardrobe, to protect them from falls.
Attach a label with the name of the group!

RIDE

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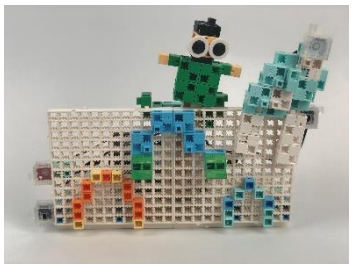
THE WALK OF THE DISTRACTED CHILD
GIOVANNINO GOES FOR A WALK (T1)

S5 T1 D3 L2 P3



Focus on:
- Spatial orientation (D3)

Goals of the lesson:
- text comprehension
- problem solving
- decision making
- organizing group work

Giovannino goes for a walk
"Mom, I'm going for a walk."
"Go ahead, Giovanni, but be careful when you cross the street."
"All right, Mom. Bye, Mom."
"You're always so distracted."
"Yes mom. Bye, Mom."
Giovannino goes out happily and for the first part of the road he pays attention. Every so often he stops and touches himself.
"I'm all there? Yes." And he laughs to himself.
He is so happy to be careful that he starts hopping around like a sparrow, but then he gets caught up in looking at the shop windows, the cars, the clouds, and, of course, there the trouble starts.

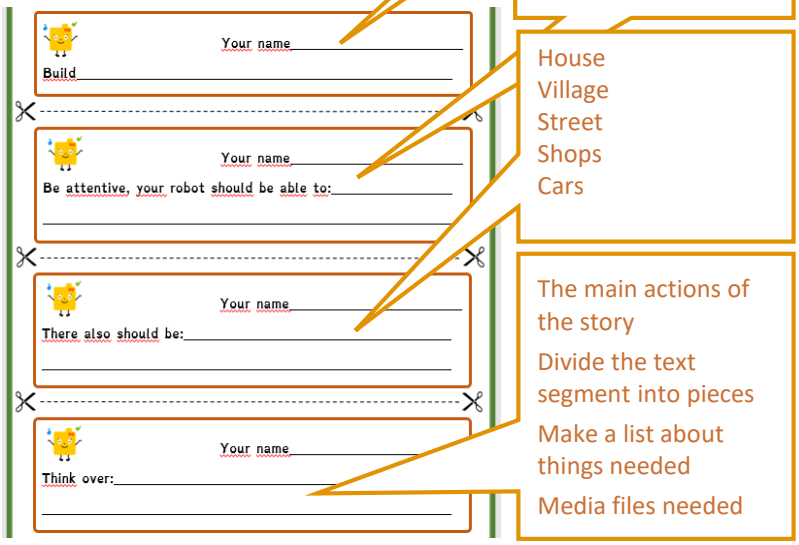
Main features and interactions of the characters

Character	Features	Interactions
Giovannino	Walks, stops, touches himself,	Move together, talk to each other
Mom	Walks, speakes	

Suggestions
- Discuss how human movements are made
- Make some movements together and the children should perceive the phases of their own movements
- Show movable anatomical models to the children
- Build a simple figure with movable legs, arms or mouth from ArTeC Blocks

How to use the character card:
Each student fills in his/her own Character card:
- writes the name of the character
- their features, movements, reactions, etc.
- collects the elements of the environment, other accessories, things to be built
- thinks over the phases, tools and materials of the robot's building

Students can use more pieces of each part of the Character card if needed!



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THE WALK OF THE DISTRACTED CHILD
GIOVANNINO GOES FOR A WALK (T1)

S5
T1
D3
L3–L4
P4

Focus on:
- Spatial orientation (D3)

Goals of the lesson:
- fine motor skills,
- problem solving,
- decision making
- life skills

Suggested materials
- ArTeC Blocks (at least the 112 pcs set) and ArTeC robotics set (1 Studuino motherboard, 2 DC motors, wheels, 2 IR Photoreflectors, 2 Touch sensors, 2 LEDs, 1 Servo motor, blaseplate)
- Mindmap or Chart draft , Storyline
- Character cards and Robotic task card template
- Pencil

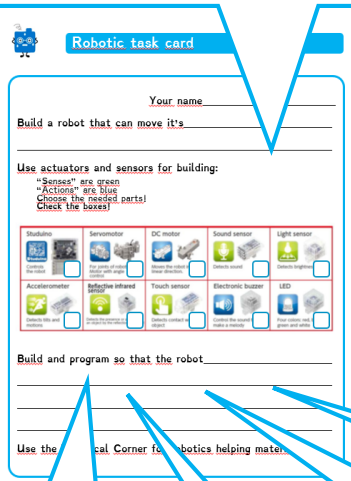
How to fill in the Robotic card?
- Choose robot's „activity" and its programming complexity according to the Character task card, the developmental aim and the programming level that fits the child's skills.
- More Robotic cards can be filled in if needed (for clarification or for differentiation).

Suggestions

Going
- Discuss how human movements are made
- Make some movements together and the children should perceive the phases of their own movements
- Show movable anatomical models to the children
- Build a simple figure with movable legs, arms or mouth from ArTeC Blocks

Jumping
- Different styles of jumping (Jumping with one foot..)

Arm
Leg
Mouth
Jump



Related topics in the Technical corner
- Programming DC motor
  - Setting power, direction (2.a, 2.b)
  - Random movements (2.f)
- Programming Servo motor
  - Building and testing the servo motor (3.a)
  - Programming waving movement (3.b)
- Using Touch sensor (4.a, 4.b)
- Using LED (5.a, 5.b)
- 7. IR Photoreflector
  - 7.a) Testing IR photoreflector
  - 7.b) Detecting obstacles
- Using random numbers (10.a)

With actors equipped with axles, the scene can be stunned.

PROG1

The little boy moves forward on a robotic platform, while the servo motor tilts, as if the little boy is jumping.

PROG2

Puppet theatre with 2 push-buttons and a screen.

PROG3

Puppet theatre run by IR photoreflector, with the little boy looking on.

PROG4

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T1
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L3–L4
P5

Ideas for robots on different programming levels

PROG1	PROG2	PROG3	PROG4
With actors equipped with axles, the scene can be stunned.	The little boy moves forward on a robotic platform, while the servo motor tilts, as if the little boy is jumping.	Puppet theatre with 2 push-buttons and a screen.	Puppet theatre run by IR photoreflector, with the little boy looking on.

Walking boy

P1 Puppeteering
- The little boy can be moved with axles and beams.
- The cloud can be lifted from behind the paravan by axles, and the wheels of the small cars also turn on axles.

P2 DC motor and servo motor driven robot
- The little boy is mounted on the carriage with servo motor .
- While moving forward, the servo motor tilts back and forth faster and faster, thus restoring the scattered motion.

P3 Puppet theatre with Touch sensors
- The characters are built on the screen of the puppet theatre.
- The little boy "sits" in the middle, his head is moved by a servo motor.
- The cloud and the car are moved by 2 DC motors on each side.
- There are 2 buttons on each side of the robot, which move the actors in the scene separately.
- As long as the Touch sensor is pressed, the DC motor and the actuator connected to it will move.
- The boy in the centre moves his head to the right or left, depending on which side the Touch sensor is pressed.

P4 Puppet theatre activated byIR photoreflector
- There are 1-1 IR photoreflector on each side of the puppet theatre.
- The boy in the middle is set in motion by a DC motor.
- The bottom sensor has a red LED, the top sensor a white LED.
- The lower IR photoreflector is activated by the small car, the upper one by the cloud.
- When the IR photoreflector is covered, the boy starts moving at different speeds and the corresponding LED flashes.
- When you move the car or cloud away from the IR photoreflector, the movement and flashing stops.