

Learning Scenario title

Investigating with robots

Education level / Age group	6-7 years
AUTHOR:	Hannemann's Alle Primary School
Country or Territory:	Denmark



Learning goals/ambitions

Through an investigative and collaborative approach, children will get their first experience with coding.

While carrying out the learning activities with the robot, we expect children to experience joy and a desire to discover and learn more about coding.



Overview of stories

Children are divided in groups of 3-4.

They are invited to bring the boxes of materials on a table to discover what is inside. Teachers explain that they need their help to see how they can play and learn with the box content.

They are then given a very brief introduction to where to place the pieces on the board and where to press the robot to make it react.





Access to teaching and learning

Access to teaching and learning	Learning activities are presented to pupils as a discovery game. Children are encouraged to work in groups, ask questions and find their way to solve the problems.
Access to assessment	Assessment aims at highlighting children's curiosity and initiative at work. Students are encouraged to investigate independently in groups – with little guidance by teachers - by trying different pieces in different contexts.



Roles

Teachers	<p>Teachers challenge students by asking probing questions, such as:</p> <ul style="list-style-type: none">• "What would happen if...?"• "Why do you think that happened when you chose to use that piece?" <p>This type of questions guide students along the discovery of how the material can be used and what for.</p>
Pupils	<p>Students must give each other space so that everyone in the group have an opportunity to try.</p> <p>All children must be involved in investigating what the material can be used for.</p>



Learning environment

Children sit in groups in the classroom. They are free to choose whether they prefer to sit at the tables or on the floor.

Each group is provided with all the materials available, so that all groups have enough things to try out in different combinations in order to find a solution to the questions posed by the teachers at the beginning of the activity.



Learning activities

The main focus of the activity is for the children to investigate autonomously to decide what the material can be used for.



Possible challenges

*Children may feel they can use only use certain pieces.
Children have to make the robot follow a certain path.*



Resources

*There was a lot of support from the adults, so they could get help if they needed it.
Each group had all the materials available, so they had many things to choose from.*