

BotSTEM – Erasms+ KA2 Project

2017-1-ES01-KA201-038204

Good practice template

1. Title of the activity / practice	Bluebots on math- and ABC-rugs
2. Origin of the activity	<p>Eva is a grade 1-7 teacher and for the last 20 years she has been working with grade 1-3, in primary school. She came across the Bluebots half a year ago and has since been using them regularly, in combination with a variety of school subjects, including language, maths, biology and physics. She stresses the importance for a teacher to carefully think through the purpose of using the robots, to avoid aimless play that otherwise often take place. For the children to develop knowledge within language and mathematics, Eva recommends the use of math- or ABC-rugs.</p>
3. Age of the students	<p>4-8 years old</p>
4. Target group (type of the learners, size of the group)	
5. School subjects + topics concerned	<p>Mathematics and language but also social aspects of the preschool curriculum, through group activities and collaboration.</p>
6. Educational goals of the practice	<p>Mathematics of varying degree of difficulty, such as for instance addition and subtraction up to 10, or for younger children just recognizing the figures or letters. On the ABC-rug spelling may be practiced.</p>
7. Duration	
8. Place	<p>Classroom / lab / outdoors / at home, etc.</p>



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9. Short description of the activity

The math rug:

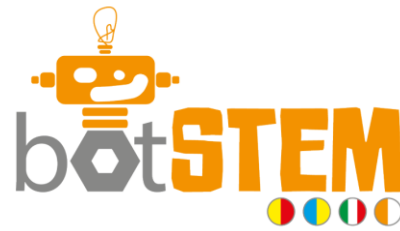
The children work in groups of three. Either, they may be given exact math tasks to solve, such as $5 + 2$, or they may use two dizers to add the sum of them. They thereafter program the bluebot to walk to the right figure on the rug. With smaller children the task might be to recognize the figure 3, for instance, and program the robot to it. Rugs may be more or less complex in its numbers, as well as the math tasks, so the exercise can be varied to fit several levels of math knowledge. Either the children work together in solving and programming, or they can have different responsibilities. One child reads the math assignment or roll the dizes, one do the math, and one programmes the robot.



The ABC-rug:

Here, the children may work with assignments of varying degree of difficulty. For the younger children, a task could be to find the first letter in their name, on the rug. The bluebot can then be programmed to go to and “find” the letter. Children may also spell words by programming the bluebot to the different letters in a more or less complex word.





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10. Evaluation	
11. Materials / Resources / technical requirements	Rugs (that can be either bought or made by the teacher on e.g. paper) and bluebots.
12. Tips for educators / theoretical background (if applicable) or curriculum context	