



BotSTEM – Erasms+ KA2 Project

2017-1-ES01-KA201-038204

Good practice template

1. Title of the activity / practice	Useless machines
2. Origin of the activity	<p>Elena Maccari has been working in High school and middle school since 1997 as Italian, Geography and History teacher and projects' teacher; presently working in IC Falcone Borsellino in Bardolino (VR)Italy at middle school. University diploma in Conservation of cultural heritage and medieval Archaeology ,Department of Education Faculty, Udine, 1996 and master degree in Educational psycho pedagogy and methodology for learning disorders, Education Faculty, Verona, 2011.She has been also working as the Vice-director of the Floireste Malfer IC ,Garda, (VR) which comprises nursery school, primary and middle school. She has also been responsible for Integration projects and digital projects.</p>
3. Age of the students	<p>From 6 years on</p>
4. Target group (type of the learners, size of the group)	<p>General curriculum Small group of 3-4</p>
5. School subjects + topics concerned	<p>Interdisciplinary and cross-curricular, involving technology, drawing, Italian</p>



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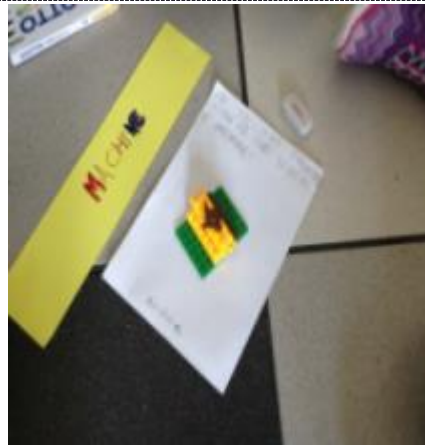
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<p>6. Educational goals of the practice</p>	<p>Knowledge of preparation and application of instructions for the use of digital tools</p> <p>Improve the creativity</p> <p>Give clear and precise instructions</p> <p>Collaborate and respect for the rules</p>
<p>7. Duration</p>	<p>90 min</p>
<p>8. Place</p>	<p>Class</p> <p>Home</p>
<p>9. Short description of the activity</p>	<p>The class is divided in small groups</p> <ol style="list-style-type: none"> 1. The members of each group elect a leader and s/he has to choose 5 Lego pieces discussing with the rest of the group (5 mins). 2. Each group plan its useless machine, build it and give it a name and decide what its use is. The group writes down the name and the function in a sheet and fold it to hide what is written (20 mins). 3. The machine and the sheet are passed to the second group that has to write down or drawing the building instruction of the machine (disassembling it) in the sheet (15 mins). 4. The machine is passed again to a third group that have to rebuild it following the manual given by the previous one and to decide what is the function of the machine and its name writing them in the sheet (15 mins) 5. The machine returns to the group that created it. [Optional activity: the group create an advertisement for the machine (10 mins). 6. All the sheets are read aloud and the teacher animates a discussion about the machine created and the general comments.



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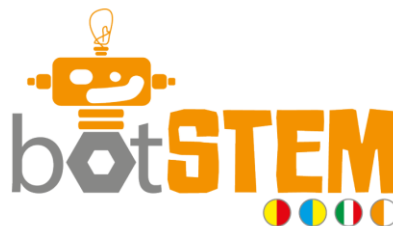
10. Evaluation

Questions, Rubric for group work, peer evaluation, teacher's observation

11. Materials / Resources / technical requirements

Lego pieces (or other objects)
Pens, felt-tips, pencils, sheets of paper

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12. Tips for educators / theoretical background (if applicable) or curriculum context	http://www.munart.org/doc/bruno-munari-le-macchine-inutili-la-lettura-n-7-1937.pdf
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