



## BotSTEM – Erasms+ KA2 Project

2017-1-ES01-KA201-038204

### Good practice template

<b>1. Title of the activity / practice</b>	<b>Planting ideas: climate-change activities for primary school</b>
<b>2. Origin of the activity</b>	Sue Johnson from the Institute of Education, London University, UK, introduces the Plant Scientists Investigate project, and presents three plantrelated activities for primary-school children. Compare the carbon dioxide concentrations of inhaled and exhaled air, visualise your own oxygen consumption or weigh up the importance of plant conservation versus economic development.
<b>3. Age of the students</b>	7-8
<b>4. Target group (type of the learners, size of the group)</b>	General curriculum Small group of 4
<b>5. School subjects + topics concerned</b>	Transdisciplinaire; biology, chemistry, mathematics, art
<b>6. Educational goals of the practice</b>	To know the function of plants in the production of oxygen; encourage students to use reasoning skills and scientific thinking, maximise group discussion, and generate their own questions and ideas.
<b>7. Duration</b>	6 sessions
<b>8. Place</b>	Classroom / outdoor /at home, etc.



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<p><b>9. Short description of the activity</b></p>	<p>Carbon dioxide in exhaled air: Children should already know that the air they exhale contains less oxygen than fresh air does. With this experiment, they can test if there is more carbon dioxide in exhaled air than inhaled air using a colour change indicator.</p> <p>My own oxygen consumption: This activity will demonstrate to children how much green space is needed to produce enough oxygen for one person for one day.</p> <p>A new ski run? This activity puts children in a real life situation where plant conservation and economic development clash. In an alpine setting, children play the part of citizens in a ski resort where new plans for ski slopes threaten an area rich in biodiversity. In this role play, children will develop abilities to discuss complex problems, examine pros and cons, and make decisions – and by doing so accept that one often has to compromise.</p>
<p><b>10. Evaluation</b></p>	<p>Questions, , , teacher’s observation</p>
<p><b>11. Materials / Resources / technical requirements</b></p>	<ul style="list-style-type: none"> <li>- 2 glass containers</li> <li>· 2 straws</li> <li>· 1 bike pump</li> <li>· Tube with dissolved potash lye (10% KOH)</li> <li>· Tube with colour indicator (phenolphthalein solution)</li> <li>· Pipette</li> <li>String · Wooden sticks</li> </ul>



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**12. Tips for  
educators /  
theoretical  
background  
(if applicable)  
or curriculum  
context**

Source URL:

Science in School Issue 10 : Winter 2008;

<http://www.scienceinschool.org/2008/issue10/psiclimat>

<http://www.plantscafe.net/>

[www.plantscafe.net/en/experiments/gallery.php?module=enex02](http://www.plantscafe.net/en/experiments/gallery.php?module=enex02)

[www.plantscafe.net/en/conservation/gallery.php?module=enco10](http://www.plantscafe.net/en/conservation/gallery.php?module=enco10)

