

Key Stage 2/3 science/geography resource:–the Floating Garden Challenge

Activity summary	Global learning opportunities	Welsh National Curriculum links	
		Science	Geography
<p>This activity is based on Practical Action’s Floating Garden Challenge. Pupils apply their understanding of plant needs to design a floating garden: this is a hands-on investigation into farmers’ response to more unpredictable flooding in Bangladesh. The resource is aimed at Key Stages 2 and 3, and includes detailed activities, PowerPoint™, video, photo resources and teachers’ notes. For more in-depth information about how floating gardens work in Bangladesh, teachers and older pupils might find this website and download useful. This PowerPoint™ is more oriented to secondary pupils. More ideas for global learning in science from Practical Action</p>	<p>GLP-W themes and outcomes:</p> <ul style="list-style-type: none"> • Developing countries • Sustainability • Enquiry and critical thinking. <p>ESDGC themes</p> <ul style="list-style-type: none"> • Climate change • Natural environment. <p>Global Goals:</p> <ul style="list-style-type: none"> • SDG 11 (Sustainable cities and communities). 	<p>Skills Enquiry:</p> <ul style="list-style-type: none"> • Planning: choice of success criteria, prediction, equipment and techniques • Developing: make observations, comparisons, explain links • Reflecting improving/ strategies. <p>Range, Key Stage 2 Interdependence of organisms</p> <ul style="list-style-type: none"> • Variety of food needed for health • Environmental factors and requirements for plant growth. <p>The sustainable Earth</p> <ul style="list-style-type: none"> • Properties of materials. <p>How things work</p> <ul style="list-style-type: none"> • Forces. <p>Range, Key Stage 3</p> <ul style="list-style-type: none"> • Application of science and technology to improve the quality of life in countries with different levels of development. 	<p>Skills Locating places, environments and patterns</p> <ul style="list-style-type: none"> • Identify and locate places and environments using globes, atlases, and maps. <p>Understanding places, environments and processes</p> <ul style="list-style-type: none"> • Describe natural and human features • Describe the causes and consequences of how places and environments change (KS3: future implications). <p>Investigating</p> <ul style="list-style-type: none"> • Observe and ask questions about a place, environment or issue. <p>Range, Key Stage 2</p> <ul style="list-style-type: none"> • Contrasting countries • Geography in the news. <p>Range Key Stage 3</p> <ul style="list-style-type: none"> • Rich and poor world: development in different countries • Responsibilities of being a global citizen.

Development You could:

- investigate Bangladesh's location and which areas are at risk of flooding, for example using this [National Geographic interactive](#)
- develop pupils' understanding of the causes, consequences and mitigation of flooding in Bangladesh using these resources from [Practical Action](#)
- use literacy skills to find out more about floating gardens in Bangladesh using this more difficult source from the [New York Times](#), perhaps using critical thinking to compare the two sources
- investigate other responses to flooding, such as this from this site about Bangladesh's [floating schools](#), or using this more difficult source from the [New York Times](#)
- consider ways people in Bangladesh are affected by and respond to climate change, using these resources from [Oxfam](#) or [Practical Action](#)
- broaden pupils' understanding to consider Bangladesh's wider development successes, perhaps using the [Gapminder site](#) with older pupils.
- contrast and compare your school garden or develop the school garden as a child led initiative helped by [RHS resources](#)

Literacy opportunities	Numeracy opportunities	Critical Thinking opportunities
<p>Oracy <u>Element:</u> Developing and presenting information and ideas <u>Aspects:</u></p> <ul style="list-style-type: none"> • Speaking • Listening • Collaboration and discussion. <p>Reading <u>Element:</u> Locating, selecting and using information <u>Aspect:</u></p> <ul style="list-style-type: none"> • Reading strategies. <p><u>Element:</u> Responding to what has been said <u>Aspects:</u></p> <ul style="list-style-type: none"> • Comprehension • Response and analysis. 	<p>Strand: Using measuring skills <u>Elements:</u></p> <ul style="list-style-type: none"> • Length, weight, capacity. 	<ul style="list-style-type: none"> • ask and respond to a range of questions, as part of an investigation • explain, reason and think about evidence • assess or evaluate information, e.g. distinguish fact and opinion and compare sources of information.

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