

## Special school C - lesson 2: Using an outdoor garden to study horticulture

### Sample teaching and learning activities

PLUs	Elements	Learning outcomes
<b>Preparing for work</b>	Taking part in a work related activity	<ul style="list-style-type: none"> <li>▪ Use a range of common gardening tools and equipment</li> <li>▪ Name the conditions that help plants grow and flourish</li> <li>▪ Describe the 4 main stages of the life cycle of a plant.</li> <li>▪ Keep a gardening diary logging the tasks</li> </ul>
<b>Keywords</b>	Horticulture, shovel, trowel, fork, soil, weeds, types of vegetables, light, heat, soils, water, root, shoot, stem, leaf, seeds, compost, Gardening Centre, spacing of seeds, transplanting, thinning, weeding	
<b>Pre-learning</b>	Students should have already covered the Primary Science curriculum. They should also have background knowledge of growing plants and flowers from home & school. (The students in this school have already participated in a group project: 'Incredible Edibles Growing your own Spuds')	
<b>Resources</b>	Gardening equipment Raised garden bed for planting. Seeds Compost (1) <a href="#">Power point 'Horticulture'</a> (2) <a href="#">Worksheet 1: 'Identifying Gardening Materials'</a> (3) <a href="#">Poster 1 – 'Maintaining Plants'</a> (4) <a href="#">Worksheet 2: 'Maintaining Plants'</a> (5) <a href="#">Worksheet 3: 'Conditions necessary for growth'</a> (6) <a href="#">Worksheet 4: 'Lifecycle of a vegetable plant'</a>	
<b>Brief overview of the lesson</b>	This lesson plan would be at least a terms work.  In a series of lessons students are introduced to various topics within horticulture. Students will focus on: <ol style="list-style-type: none"> <li>1. the recognition and handling of materials and equipment required.</li> <li>2. stages of preparation of the ground prior to planting.</li> <li>3. planting their own vegetable plot .</li> <li>4. plant maintenance. e.g. watering, weeding harvesting</li> <li>5. the conditions necessary for growth of vegetables from seed.</li> </ol>	

	<p>6. recognising the different parts of a plant and understanding the life cycle of a plant</p> <p>Students are required to keep a diary logging each of the above 6 task carried out during the course of the horticulture lessons.</p>
<p><b>Introduction</b></p>	<p>As an introduction to the topic, the teacher explains the term ‘Horticulture’ and asks students what experience have they in relation to growing plants and vegetables. The students participate in the class discussion.</p> <p>The teacher shows students a picture of plants and vegetables (Power point ‘Horticulture’ Slide 2) and asks the students to suggest what vegetables they would like to grow.</p> <p><i>Task 1.</i> Students are shown a selection of garden tools and asked to name each one (Power point ‘Horticulture’ Slide 6 – 24).</p> <p>In a class discussion the teacher and the students discuss, plan and agree what needs to be done to carry out/complete project.</p>
<p><b>Main activity</b></p> <p><i>James is working on the same content as his classmates but at a slower pace. The content has been adapted to suit his ability. Concepts will be introduced &amp; taught through a series of pictorial images and practical tasks. Tasks will be demonstrated step by step to cater for his needs.</i></p> <p><i>All these activities will be modelled by the teacher and observed by the students. Students will be encouraged to actively participate in practical tasks whenever possible.</i></p>	<p><i>Task 2 &amp; 3.</i> The teacher demonstrates the preparation of the ground and shows the students how to plant a variety of vegetables. The students follow the teachers’ example and prepare their own area of ground and plant their own vegetables. Students are tested on their knowledge of gardening materials by attempting worksheet 1 ‘Identifying Gardening Materials’ (2)</p> <p><i>Task 4.</i> The teacher discusses the importance of garden maintenance after the initial planting of the vegetables. Transplanting, thinning, weeding are described to the student orally with visual posters ‘Maintaining Plants’ (3) and each maintenance element is then demonstrated practically. Students maintain their own garden with supervision and assistance. Students then complete worksheet 2 ‘Maintaining plants’ (4)</p> <p><i>Task 5.</i> A number of science experiments are carried out in class to demonstrate the conditions necessary for growth. The conditions necessary for growth are: Light, Heat, Soil and Water. Five investigations are set up and monitored by students (See Power point ‘Horticulture’ Slide 26 – 30). The teacher assesses the learning by asking students to complete worksheet 3 ‘Conditions necessary for growth’ (5)</p> <p><i>Task 6.</i> Students are shown how to label each part of the plant (See Power point ‘Horticulture’ Slide 11 – 15) and also how to recognise the sequence of the life cycle of a plant (See Power point ‘Horticulture’ Slide 4). Students complete worksheet 4 ‘Lifecycle of a vegetable plant’ (6) using the power point as an aid.</p> <p>Students are and encouraged to keep a gardening diary (noting time, date, day and month) and are assisted in making recordings wherever possible.</p>

<b>Closure</b>	<p>Students present their practical work to their school friends, teachers and family and demonstrate some of the skills and knowledge they have gain through undertaking this series of lesson in horticulture.</p> <p>Students evaluate their own logbooks and identify any problems they have overcome and any areas they would like further training in.</p>
<b>Follow up Lessons/Activities</b>	<ul style="list-style-type: none"> <li>• Project work.</li> <li>• Recap /Drill &amp; Practice activities.</li> <li>• Visit to Local Famer’s Market.</li> <li>• Students will demonstrate how to plant certain vegetable to a junior class.</li> <li>• Students will invite other staff and students to come &amp; view their garden.</li> <li>• Also parents may be invited in to view the work of the students</li> <li>• Encourage the idea of growing your own &amp; promoting healthy eating /lifestyle.</li> </ul>
<b>Gathering evidence of learning</b>	<ul style="list-style-type: none"> <li>• Teacher observation</li> <li>• Questioning, Talk &amp; discussion</li> <li>• Worksheets / Assessment sheets</li> <li>• Pictures of completed tasks</li> <li>• Video material of each task</li> <li>• Student Diary</li> </ul>
<b>Student Voice</b>	Quote from student: ‘ I love gardening and planting seeds, I’m very excited’