

Glenreagh Public School Garden Project

ES1-S3 Term 2 2018

Big Ideas/Why does this learning matter?	The Coffs Harbour Botanic Gardens have donated their old board walk to the school. The school in consultation with the P&C have decided to use this resource to create a garden space for all living things in our school environment. ES1 and S1 students will learn who uses our school grounds, how can we attract and protect these species. Students will also consider the population of our students and community and their history when designing elements of the garden.
Driving Question	How can we create a useful space for all living things in our school environment?
Supporting Questions	How can we attract and sustain native insects and animals? What if native bees were removed from the ecological web? How can we fund this project and who can help us? How can we streamline garden care with automated machinery? What flora and fauna are native to our area? How/Why have they adapted to our area? What kind of plants did the local Gumbaynggir people use to support and sustain life?
Syllabus Outcomes	<u>Science</u> Living World, Working Scientifically, Built Environments, Working Technologically, Digital technologies, Products. <u>Mathematics</u> Measurement – length, area, volume and capacity, working mathematically. Data – Graph growth etc. Entrepreneurial skills – addition and subtraction of money, costing of project. Culminating in fundraising stall at the Glenreagh timber festival with P and C support.
Hook/Entry Event	Visit to the Botanic Gardens and cultural display.
Possible experts	Rick Ackland from Botanic Gardens, Michael Aboriginal elder, community members to assist with building, bee keeper?
Audience	Students K-6 will be involved in designing the garden space and then all students will be involved in the ongoing care of the garden.
Culminating Event	Partial garden opening on 9 th August at Education Week picnic. Students will show parents and community members how the garden has progressed. At Presentation Day in Term 4 we will open the completed garden and view a video of our journey.
Milestones	Description of event/process/activity/program
Phase 1 – Plan elements and layout of garden.	The unit will begin with a visit to the Coffs Harbour Botanic Gardens to participate in activities relating to careers in horticulture. On the same day they will also be exposed to an Aboriginal cultural show. These events will engage students in considering the layout and elements of a garden space as well as the uses of flora in Indigenous history. <i>How can we attract and sustain native insects and animals?</i> <i>What if native bees were removed from the ecological web?</i> <i>What flora and fauna are native to our area? How/Why have they adapted to our area?</i> <i>What kind of plants did the local Gumbaynggir people use to support and sustain life?</i>

	<p>Students will research native flora and fauna species to Glenreagh and determine who will use our garden. They will then research how we can cater to these species needs. Students will also research flora used by the Gumbaynggir people and include this in a bush tucker garden.</p> <p>Students will map out a scale plan of how the garden will look and collaboratively create a model i.e. each group of students will be responsible for creating a specific element for the model.</p> <p>Students will then code Ozobot through the model and produce a digital tour of the garden to share with community members.</p>
<p>Phase 2 – Funding the project and begin building.</p>	<p><i>How can we fund this project and who can help us?</i></p> <p>Students consider what materials we will need to complete the project and who can help us (e.g. careers and community members). They will conduct research to determine the cost of the garden project based upon the materials that we will need.</p> <p>They will then brainstorm a fundraising event and product to sell at the local Timber festival in order to raise money for the garden project and appeal to necessary community members to engage their assistance.</p> <p>Stage 2 & 3 students will write business plans and develop a budget for the production of their product and estimate profit.</p>
<p>Phase 3 – Streamlining garden care.</p>	<p><i>How can we streamline garden care with automated machinery?</i></p> <p>Stage 2 & 3 students will create garden care books to teach ES1 and S1 students how to care for the gardens.</p> <p>They will also develop an innovative product powered by Sphero that will streamline garden care e.g. seed planter, irrigator, rotary hoe etc.</p>
<p>Phase 4 – Presentation.</p>	<p>The partial garden opening will be held during Education Week in Term 3. At the end of Term 4 the completed garden project will be opened at presentation day and a video created in collaboration with students will be displayed.</p>