

Petal Pushers

Environmental and Land Based Science at Kings Manor School, Tyneside

Aim

To teach students a science GCSE in an alternative way and to promote engagement and enjoyment and vocational learning.

Action

Along with the students we developed a school allotment on site and created an exciting learning environment.

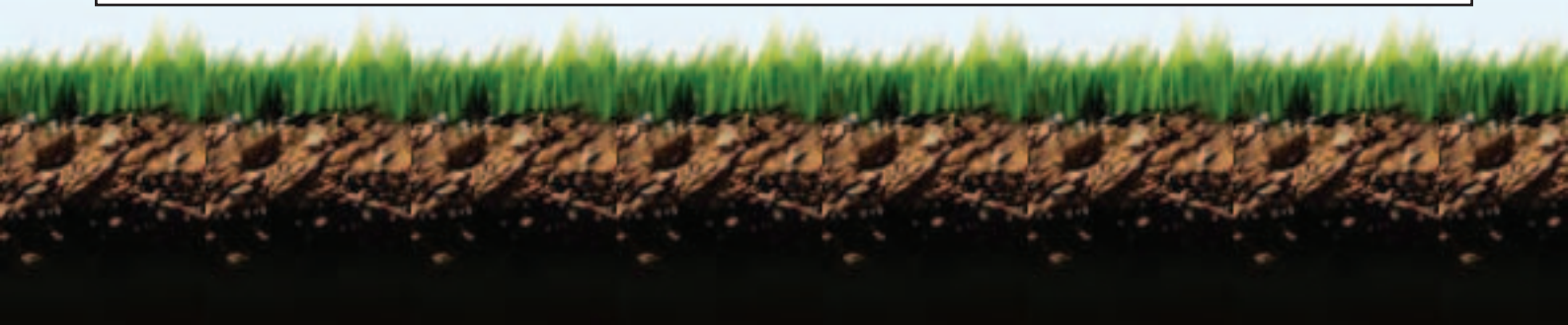
Outcome

Students have higher levels of motivation and enthusiasm for science, along with increased self esteem and pride in their work.



Details

Kings Manor is a secondary school with about 600 students, set in a busy town. The surrounding area is very built up with many homes having limited garden space. I initiated the project to enhance the curriculum by engaging students in a different learning experience. I wanted students to see the many sides to science and enjoy an alternative to the classroom environment. As a trial, we decided to pilot the Environmental and Land Based Science GCSE with our low-ability students who were not enjoying the traditional science.



Growing Schools Case Studies



In our science department we already house a number of animals and decided to extend this project by creating a growing space for our students. We fenced off an area outside the science department. At the beginning of the academic year we started with a large green space and 12 raised beds. Students joined in with landscaping the allotment and we spent time planting various bulbs, trees and border bushes. Since then we have successfully harvested winter crops of cabbage, spinach, pak choi and lettuce. We have introduced wildlife into the garden in the form of bird, bat and hedgehog boxes. We also hatched some chickens which live in our garden.

I lead the project as science teacher and I am lucky to have the support of a teaching assistant (TA) and the science technicians. The practical aspect of this project has been beneficial in many ways. Students involved are highly motivated and so proud of the work they do. The theory side of the course has been equally well received, although on an administrative point it has been hard work. Producing schemes of work has been slow and very time consuming. On the funding side we have had full support from our head teacher and extra funding for the project was invested as an enrichment opportunity. The project is taught to KS4 the main framework being the Environmental and Land Based Science GCSE. Various growing challenges have been carried out with other year groups. Initial mock exam results are promising with most students exceeding their targets and all students enjoying the learning experience. Some quotes from the staff and students participating in the project:

‘It is wonderful to see the students really enjoying their work’ Science Teacher

‘It’s nice to see the enthusiasm in the pupils’ faces while they are in the garden’ Teaching Assistant

‘We enjoy being outside and learning in a different way’ Michael, Year 11 student

‘We love being outside in the fresh air and working in the garden’ Crystal, Year 11 Student

Linked Resources

OCR GCSE Environmental and Land Based Science Specification was used to create a departmental scheme of work.

I have also used ELBS material from www.wmnet.org.uk/resources/ELBS/index.html and various outside organizations such as Groundwork, Middlesbrough Healthy Towns Growing Together Officers and DigIt Projects.

