

Developing global citizens through sciences, social studies and technologies workshop

Are plant the answer?

Some ‘active learning’ activities, (based on the work of Geoff Petty).

Active learning activities are those which, “..require students to make their own meanings of the concepts you are teaching.”

“What the learner does is more important than what the teacher does.”

Petty,G. (2006), *Evidence Based Teaching – A Practical Approach.*

**Pilot and navigator** – This technique could be used by pupils for working on the ‘hanging drop’ and microscope activities (see *Are plants the answer?, Workshop practical activities*, Activity 2). Here one pupil follows the instructions, the other carries out the task. They then swap roles, so that everyone completes the activities. Pupils may be paired so that the ‘stronger’ does the practical bit first and the other learns from watching. This would work well when preparing the ‘hanging drop’.

**Research tasks**

-What are phytoplankton? Where are they found? How do they contribute to atmospheric gas- balance?

- Phytoplankton and the greenhouse effect

- How environmental change is affecting phytoplankton

- Studying phytoplankton – the NASA images

* **Jig-saw** – each group researches and becomes ‘expert’ on one area. Groups are then mixed, one ‘expert’ on each topic form the new groups. ‘Experts’ share their learning with the group.
* **Presentation -** Groups research all areas. They will have to do a presentation on one sub-topic. They won’t know which until presentation time.