



SATIPS

Research
Education
Training

SCIENCE

Editor

Luke Busfield

Head of Science
Ludgrove
lb@ludgrove.com

This summer term the old favourite “Plant Biology” has, inspired by Mr. T. Ferry at Papplewick, undergone something of a rebranding.

“Torturing Plants” – the science of denying these organisms various things and seeing how it effects them, has been a far more exciting prospect and when coupled with the concepts of hydroponics and growing food on interplanetary missions, has proven really quite exciting.



Bean growing

After the standard cress experiments into germination we studied broad beans. Endless opportunities for measurement, recording, data handling, and graph work presented in several forms. Increase of mass of the bean as it absorbs water before germinating, the height of the plant as it grows, the number of leaves, and numerous other data points (of various levels of usefulness) presented themselves.

This year I experimented with sandwich bags taped to a window, creating a miniature greenhouse, which was very effective.

This was part of our Space Education Quality Mark preliminary work and will contribute to our final portfolio. More on the SEQM will follow another time.

Re-pot your beans before the leaves come in to contact with the bag because those leaves will turn black and die.

You will need to have a suitable solvent ready to remove the gum from the glass which, after several weeks, will have transferred and fixed firmly to the silicon dioxide. Electrical tape proved particularly adept at doing this.

Also, be mindful of how you have taped the bag shut and attached it to the window. My delightful Year 5's managed to create something that could have passed as a satanic ritual.



Improved storage

As I become increasingly fusty and cantankerous with the looming of my 40th orbit of the sun, I have become increasingly bothered that a large part of our role as science teachers appears to be getting the apparatus neatly put away. My midlife crisis is likely to involve taking a picture of each Gratnell tray with its contents neatly arranged within.

The picture will be printed on A4, laminated, and put in with the relevant apparatus so that there is no ambiguity as to how the students are expected to present the equipment on its return. This should generate enough time for me to find something else to gripe about.

Chalk

After a flashback of teaching science in a comprehensive close to the tower blocks in Reading, I splashed out on a small box of coloured chalks and have had much fun with my investment. The chalk is excellent for marking out distances on vinyl flooring and the variety of colours means that different groups do not mix up their marks. Rolling marbles down tubes and across the floor to measure E_{GP} has rarely been so fun and the chalk is extremely easy to clean up afterwards.



And another thing...

It is always irritating when you spend time researching a piece of apparatus, hunt for the best price, order the kit, wait for it to arrive, carefully open the box in bowel straining excitement, test the latest investment, and then go to put it away only to find that it will not fit in a Gratnell tray.

If I had a choice between a piece of equipment that was not stated to fit in a tray and one that was, I know which one I would pick.

Surely those clever people at Gratnell are missing a trick. There must be money to be made from a scheme which states clearly that apparatus are compatible with their trays...





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Courses and Events

A selection of forthcoming courses for Autumn 2019:

Venue : London

- 14 Oct Strategies for using iPads/ tablets in class teaching
 - 14 Oct Online E-safety for schools and classrooms
 - 16 Oct Art Scholarship
 - 18 Oct Improving Pupil Progress by metacognition & self-regulation
 - 4 Nov Moving on to Middle Management
 - 8 Nov Gender Differences in the Classroom
 - 11 Nov Holistic teaching in the EYFS
 - 11 Nov EYFS Teaching with Inspiration
 - 15 Nov Lesson Observation and Performance Management
 - 22 Nov Leading Music to Outstanding
 - 27 Nov Art Scholarship
 - 18 Nov KS2 English Conference
- Venue: The King's School Canterbury Kent*

For more information on this terms Courses please see the SATIPS website or contact the SATIPS Course Director.

These courses will run as training days in London, Bristol, Birmingham or York.

The cost of the day courses includes follow-up project based work and one to one feedback. They are also available as inset days.

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Bespoke training packages for schools are available with discount for more than one course booked.

For more information please email the team on training@satips.org or telephone **07584 862263**.

Prep School Magazine

'Prep School' is published three times a year. It offers readers in prep schools a broad range of authoritative articles on educational issues.

Editor: Paul Jackson (eajackson22@hotmail.com)



Competitions, Exhibitions and Events for pupils

SATIPS offers a variety of pupil-focused events. Over many years schools have enjoyed entering their pupils in events that have a nationwide attraction with high standards. These events include:

- **SATIPS Challenge** (annual general knowledge quiz)
- **National Handwriting Competition**
- **Poetry Competition**
- **SATIPSKI**
- **Annual Art Exhibition**

Full details of all these events are at www.satips.org/competitions