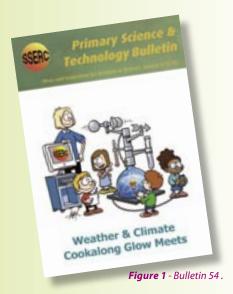
Primary Science & Technology Bulletin



Ideas and inspiration for teachers in Primary Schools and S1/S2



SSERC_Meets: SSERC's online CPD



Aimed at primary teachers the objective was to provide SSERC's usual hands-on, practical science CPD to classrooms throughout the country. It seems that this model for CPD was well received with one teacher commenting, "Thank you for a fantastic cookalong CPD session... Please can we have more CPD like this?"

Keen to oblige, SSERC has broadcast (at June 2017) no less than 34 online cookalong CPD events for which primary teachers throughout the country could apply.

Now known as SSERC_Meets, the principle remains the same: the provision of hands-on, practical science (and now also technology) CPD. 24th March 2011 was an auspicious day for SSERC. That was the day that the first "cookalong" was broadcast.

Those of you who are interested in our development of the Weather and Climate Cookalong Glow_Meet can read all about it in Bulletin 54 [1], Figure 1.



Figure 2 - Contents of a SSERC Meet box (Microbes for Minors).

The CPD provided continues to be very well received: based on evaluations in 2015/16, the satisfaction rate was very high with 95% of respondents indicating that the SSERC_Meets had met their expectations and professional needs very well with 75% indicating that they would definitely use the activities with their pupils.

In the academic year 2016/17 we ran 6 which were attended by over 650 teachers. In addition, we have used this model of online CPD as a way of providing additional SSERC training under our Primary Cluster Programme.

Thanks to funding from Scottish Government, these are provided at no cost to the school. All we ask is that you login to the SSERC_Meet and complete our online evaluation. As we start the new session we are able to offer 6 SSERC_Meets (Table 1).

If you and your colleagues would like to join one of our SSERC_Meets please complete an online booking form [2]. We only need one person in the school to apply.

COURSE NAME	DATES	CLOSING DATE	LEVEL
Pneumatics & Hydraulics	28-09-2017	28-08-2017	Early - Second
Teddy in the Park	04-10-2017	04-09-2017	Early
Getting to Grips with Friction	07-11-2017	09-10-2017	Second
Pneumatics & Hydraulics	20-11-2017	23-10-2017	Early - Second
CO ₂ Chemistry for Primary Schools	28-02-2018	29-01-2018	Second
Good Vibrations	07-03-2018	05-02-2018	First - Second

Table 1 - SSERC_Meets for 2017/18.

Shortly after the closing date you will be advised if your application has been successful and your school is being offered a place.

If you accept the place offered you will be sent a box of resources (Figure 2) which you and your colleagues can use, in the comfort of your own classroom, to carry out a series of practical activities. You are sent details of how to connect to our broadcast and through a mixture of pre-recorded video material and live presentation you participate in SSERC CPD without leaving school.

The key, unique features of SSERC's online CPD are that you can ask for help from members of SSERC staff who are presenting the SSERC Meet in real time and (almost) all the materials you need to join in the practical activities are provided. We do occasionally need you to supply some resources, for example, water or scissors or perhaps to prepare a resource in advance as in Further Fun with Forensics where you need to make up red cabbage indicator (red cabbage and jug provided you supply hot water!).

Each resource box contains sufficient materials for use by 6-10 teachers although we have had examples of teachers who have participated on their own (and in their holidays!) through to groups of 20 or more. In the latter case, there would be something practical for every teacher to do but not everyone could do everything! We also provide access to the resources so that you can view the video materials again should you need a refresher before doing the activities with your class.

References

- [1] http://www.sserc.org.uk/images/ Primary_Bulletins/54/SSERC_ Primary_Bulletin_54_final.pdf.
- [2] http://www.sserc.org.uk/book-courses-online.

Rolls-Royce





Celebrating success

The Rolls-Royce Science Prize is an annual awards programme that helps teachers implement science teaching ideas in their schools. The prize recognises and rewards excellence in science teaching across the full spectrum of teaching.

The prize scheme is open to individuals who have been on an ENTHUSE-funded course either at the National STEM Learning Centre (NSLC) or at SSERC. The awards are based on the quality of an Action Plan submitted at the end of a course. Each year 50 Special Merit Awards of £1,000 are made and the winners of those awards are then eligible to progress through the scheme. Over recent years a number of delegates from SSERC courses have made it to the finals and along the way have generated significant funding for their schools. So, for example, Danielle Timmons from St Vincent's Primary in East Kilbride has been awarded in excess of £10,000 for her school over the past 2 years and Jodie Blincow from Argyll and Bute was awarded the Eden Prize in 2014.

Rachel Wolford (4th from left) at the House of Commons for the ENTHUSE Celebration Awards on 20th July 2017. Judging for the 2017 Rolls-Royce Prizes has recently taken place. The really good news is that 5 participants on a recent SSERC Primary course (Supporting STEM) have been nominated to receive Special Merit Awards. Rolls-Royce tell us that 5 Awards to participants on a single course is 'unprecedented'. Our congratulations go to all the winners.

We now know that two of the participants have also been successful in reaching the finals - well done to Tracey Ellicott (Fife) and Maggie Harrison (Argyll and Bute). This year's Supporting STEM course is now open for applications, please see www.sserc.org.uk/bookcourses-online.

Further success followed on 20th July 2017 as the winners of this year's ENTHUSE Celebration Awards were announced at a prestigious event at the House of Commons. These awards recognise and celebrate a range of inspirational teachers and technicians from across the UK. We were delighted that the 2017 ENTHUSE Award for Excellence in STEM Teaching in Primary went to Rachel Wolford from Hythehill Primary School in Moray.



Health & Safety update: making putty (or slime) in class

We've recently received a number of queries regarding the use of eye wash or contact lens solution to make slime in class.

Guidance has changed since we published our Bulletin article on 'Putty Investigations' in spring 2010 (Primary Bulletin no. 51) [1]. There we provided a list of ingredients for making putty or slime. The ingredients included borax crystals which at the time could be purchased from a pharmacy or a school chemical supplier but in line with current health and safety advice, we now recommend that you **DO NOT** use borax in this form. The solution made from the borax is not harmful but the solid form should **NOT** be handled by children. If you would still like to make slime in school you can use some brands of eye wash. If the ingredients list on the eye wash does not include boric acid then the product will not be suitable for use in making slime. While it is safe to use this ingredient in solution, over time, as the slime mix dries out, it presents a potential hazard. Therefore if you make this in class we would recommend that the children do not take the slime home and that it is disposed of as soon as the class investigations are complete.

Following a recent article by CLEAPSS [2], we tested and adapted a range of recipes for slime and found the following to work best:

- White washable PVA glue (1 dessert spoon).
- Bicarbonate of soda (1/4 dessert spoon).
- Eye wash (15 drops).
- Shaving foam (optional; 1 squirt).



Figure 1 - Materials required for making putty (slime).

Put the PVA into a suitable container and add the bicarbonate of soda. Mix well before adding the eye wash and continue mixing. The shaving foam increases the volume of slime that is made (see Figure 2).



Figure 2 - Slime with shaving foam added.



References

- [1] SSERC Primary Bulletin No. 51 http://www.sserc.org.uk/images/ Primary_Bulletins/51/PB_51.pdf (accessed 19th June 2017).
- [2] CLEAPSS An organisation that provides health and safety advice to schools in England, Wales and Northern Ireland.