

Re-thinking Primary Science

Getting Prepared Post-SATs!

The autumn term saw the successful launch of a new primary science course at the Science Learning Centre East Midlands. 'Getting Prepared – Post SATs! Re-thinking Assessment at KS2' was designed and led by Rosemary Feasey, and provided teachers with a valuable insight into Assessing Pupils' Progress (APP) in science. The course also looked at Assessment for Learning (AfL) strategies and provided delegates the opportunity to think about how they could be more creative in science, now the pressures of SATs have gone.

Speaking about the course delegates said: "Excellent resources, useful tips that are practical to use in the classroom."

"As a new Science Co-ordinator all of it was very useful. The activities were very enjoyable."

"Knowledge and presentation excellent."

"A really enjoyable and useful course. Thank you very much!"

The Science Learning Centre East Midlands offers a range of courses to support assessment and creativity in primary science, but if you would like to see this course feature on our programme again, do let us know.



Delegates on the primary science course

Outdoor Learning

Would you like to know how to make more use of your school grounds? Want to know how you can use outside spaces effectively in your teaching? Coming up in the summer term at the Science Learning Centre East Midlands is "Outdoor Learning: Using the School Grounds". Led by Gaynor Weavers this course looks at the benefits of stepping outside the classroom and will give practical advice on how to plan exciting and inspiring investigations to enhance pupil learning and understanding. The course will also feature the new and exciting resources from the Darwin Treasure Chest and The Great Plant Hunt. In addition there is the opportunity for 15 teachers to claim a £100 bursary towards the cost of the course from the British Ecological Society. For further information or to book on the course, please contact us as soon as possible!



Delegates exploring the local park

Contact Us

The national network of Science Learning Centres has been created to bring about innovation and inspiration in the science curriculum. The network, which is made up of nine regional Centres across the country and a National Centre, exists to ensure that access to high quality professional development is within easy reach across the UK.

The courses offered at the regional Centres include at least one day's training together with on going support through classroom exercises and online materials. The National Science Learning Centre offers a different and complementary experience by providing longer, more intensive residential courses that cater for teachers and lecturers from across England, Scotland, Wales and Northern Ireland.

National

Email: enquiries@national.slcs.ac.uk
Tel: 01904 328300

East of England

Email: enquiries@eastengland.slcs.ac.uk
Tel: 01992 503498

East Midlands

Email: slcem@le.ac.uk
Tel: 0116 252 3771

London

Email: enquiries@london.slcs.ac.uk
Tel: 020 7612 6325

North East

Email: slc.northeast@durham.ac.uk
Tel: 0191 370 6200

North West

Email: slc.northwest@mmu.ac.uk
Tel: 0161 247 2944

South East

Email: enquiries@southeast.slcs.ac.uk
Tel: 023 8059 8810

South West

Email: info@slcsw.org.uk
Tel: 0845 345 3344

West Midlands

Email: enquiries@westmidlands.slcs.ac.uk
Tel: 01782 584 430

Yorkshire & the Humber

Email: enquiries@yorkshumber.slcs.ac.uk
Tel: 0114 225 4891



For details of your nearest centre visit
www.sciencelearningcentres.org.uk

Science
LEARNING CENTRES



Newsletter

Professional development in science teaching **East Midlands edition** Spring Term 2010

Connect Space Academy Teachers' Conference

A new and exciting collaboration took place during Easter 2009 between the Science Learning Centre East Midlands and the National Space Centre. The collaboration brought about a new and exciting three day residential course focussed on how the theme of 'Space' can be used as an inspirational hook to deliver curricula in STEM subjects in schools and colleges.

The conference comprised a number of workshops and key note presentations, and was held at both the Science Learning Centre East Midlands and the National Space Centre. Delegates had the opportunity to participate in a number of practical hands-on sessions specially designed to give insights into the role of space in modern life and how these could be related to applied science, physics, biology and chemistry topics.

In addition there were presentations given by some of the country's leading space researchers, including Professors Martin Barstow and Terry Moore, who brought cutting edge science to life and made it accessible for the classroom. Also included was a tour of the National Space Centre; a Space Careers Industry Showcase; free resources and much, much more!

Delegates commented:

"The best training course I've been on in 27 years! Fantastic, wonderful mix of fun, theory, knowledge, advice, etc. Challenging, thought provoking, inspiring! Every aspect was first rate. The energy, the enthusiasm, the dedication and the sheer hard work you have put into it. Well done. Thank you all so much."

"One of the best courses I've been on – and I have been on many! Motivated, informative, practical and inspiring. I will be taking many of the ideas straight into the classroom to engage the hearts and minds of the scientists of the future."

We are currently planning the 2010 conference which will include a number of new sessions and key note presentations by Professor Frank Close, Dr Lewis Dartnell and National STEM Director John Holman.



Delegates at Space Academy 2009

Get Involved!

Building upon our reputation for delivering high quality CPD for all those involved in science education from early years to post 16 we would like to invite schools from across the region to consider becoming a Science Learning Centre East Midlands satellite centre.

Becoming a satellite centre not only means that the Science Learning Centre East Midlands can widen its reach and improve accessibility for teachers, technicians and teaching assistants, but working in partnership with us can also be of benefit to the school and could even lead to joint projects being undertaken.

The school would need to have a named person willing to act as the main contact point; a reception area for delegates attending any courses; access to a meeting room and/or laboratory in which the course can take place; refreshment facilities and technical support for courses where necessary.

The Science Learning Centre East Midlands would pay a hosting fee, cover refreshment costs and ensure a member of the team was present to 'meet and greet' trainers and delegates. In addition we can offer a free place for a member of the schools' staff on any hosted course.

John Cleveland College in Hinckley is currently a satellite centre for us. Sue Cure,



Delegates on course at John Cleveland College

our main contact and senior technician from the school explains how the college's partnership with the Science Learning Centre has grown:

"It all started about five years ago when we were introduced to the Centre. To begin with we helped course tutors but were very much in the background. Then we started coming up with our own ideas and the Science Learning Centre was very supportive - they just said 'yes, go for it'."

Now we run courses for science technicians and teaching assistants which we've designed and developed and hold an annual continuing professional development conference for technicians. We've also hosted the Royal Society of Chemistry (RSC) 'Chemistry for Non specialist' courses.

Working with the Science Learning Centre has been very important for our own CPD. When you work as a technician there is not much time for development of ideas. We have to put a lot of research into the courses we devise so we have had to up our game as well. Working with the RSC has given me ideas for chemistry practicals which I then encourage our science teachers to use in the labs at John Cleveland."

Please contact us by e.mail to slcem@le.ac.uk if you wish to be considered.

Discover: news, bursaries and courses for teachers, technicians and teaching assistants across the UK. See inside to find out more.

SASP Case Study

Tracey Hall is a GCSE science teacher of five years, who is participating on the physics Science Additional Specialism Programme (SASP) course at the Science Learning Centre Yorkshire & the Humber. SASP is designed for teachers without a formal qualification in chemistry or physics but who are or who would like to be, teaching these subjects to pupils aged 11 – 19 years.

Tracey was asked how things were progressing on the course and whether it was living up to her expectations. "My strength is in maths. I was asked to teach the maths part of physics to the students. We couldn't understand why some students were struggling so much and they identified the problem themselves!"

"The course has been great. I find that now I fully understand the topics, and whereas once I would just tell the students the topic for fear of them asking a question that I couldn't give an answer to, now I am more confident and let them find out the answers for themselves by using various questioning techniques."

"When I started the course I was very apprehensive. I didn't know what to expect. And if I'm honest I had little belief in myself, but now, I've been forced to question how I teach. Not only physics, but in chemistry as well. I feel more confident."

There is no course fee and, on passing the assessment tasks, participants will receive 60 credits (graduate level), and then be eligible for a bursary (currently £5,000). To further enable teachers to take part in the course the Training and Development Agency for Schools (TDA) will fund up to £150 per day towards the cost of supply teacher cover. The 40 days programme is divided between theory and practical work and has a flexible structure to reflect the needs of the individual participants.

Schools will benefit by having a teacher that can teach up to A-level, without the need to recruit additional staff. Sharing of best practise with colleagues will result in more engaged students wanting to learn

science and choosing to take these subjects as they move in to year 10, and then on to A-level.

SASP is funded by the TDA and is being delivered in the majority of the Science Learning Centres across the country.

To find out more about the opportunities of participating on a SASP course at the Science Learning Centres, visit www.slcs.ac.uk/network/sasp

"Now I have year 8 and year 9 students who are more inquisitive about science; they all want to learn..."

Tracey Hall, SASP participant

Opportunity to Visit the World's Largest Physics Experiment

The Science Learning Centres are offering teachers the opportunity to join two study visits to the Large Hadron Collider and see the experiments taking place at CERN, the European Organization for Nuclear Research, near Geneva.

The first visit is from 16 - 19 February 2010, and the dates of the second visit will be confirmed shortly. They are part of the Bringing Cutting Edge Science into the Classroom CPD Programme funded by Research Councils UK (RCUK).

The visits are suitable for KS4 and advanced level physics teachers, who will be able to see the work going on at CERN, update their knowledge of particle physics and return to the classroom equipped with new ideas and exciting contemporary science contexts for teaching physics.

The visits are free and thanks to funding from RCUK qualifies for an Impact Award of £200 per training day (equivalent to £600). Any teacher from a maintained school or college in England can apply.

The award, dependent on completion of reports demonstrating evidence of the impact of the visit, can be used to fund the cost of flights, accommodation, meals and other expenses.

Places on both visits are limited and teachers who have taken part in previous Science Learning Centre network visits to

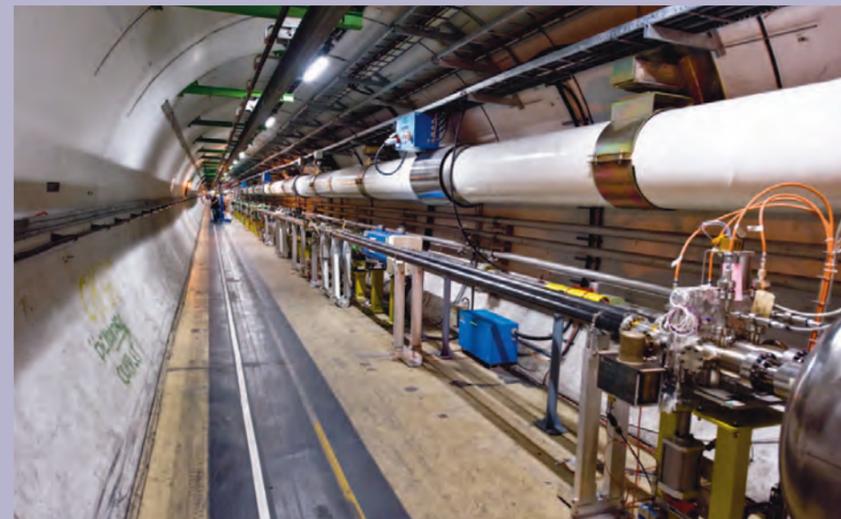


Image: CERN ©

CERN will not be eligible.

For more details or to book a place contact your regional Science Learning Centre: www.slcs.ac.uk

For information on other Bringing Cutting Edge Science into the Classroom courses visit www.slcs.ac.uk/cuttingedge

Accrediting Continuing Professional Development - making it valuable and valued

Most professions require members of their community to engage in professional development which leads to recognised status within the community. Once this has been achieved, professional development is required to maintain this status. This is true for the medical profession, accountants, lawyers, engineers and many other professions. Indeed it is now also true for lecturers in FE.

Teachers are keen to engage with professional development, especially if it leads to them being more effective in the classroom. In areas of specialist knowledge, such as in science and mathematics there is a real hunger to keep themselves up to date with their subject, but also to extend the range of pedagogical approaches used in the classroom to engage learners. Experience has shown that teachers respond enthusiastically and thoughtfully to high quality professional development often showing great tenacity and creativity

when implementing change in their school/college based practice.

The national network of Science Learning Centres is developing an opportunity for teachers to achieve professional recognition arising from their engagement in the network professional development programme. The standard of the award will be set at the equivalent of 30 credits at Masters level. It is hoped that these awards may be ultimately used by teachers as part of Masters programmes with their local universities.

We are currently looking for volunteers who are already planning to do professional development at one or more of the Science Learning Centres from April 2010 onwards who will pilot this accreditation.

The aim is to support teachers through related activities comprising professional development episodes, classroom based action research, interaction with an on-line learning environment and a short

independent study all encapsulated in a final assessment portfolio.

If you would like more information about getting involved in this opportunity to receive proper acknowledgement for your professional development please contact either the director of your regional Science Learning Centre (see www.slcs.ac.uk for contact details), or Miranda Stephenson, Accreditation Leader for the national network of Science Learning Centres at m.stephenson@slcs.ac.uk



Rarely Cover: a Mythical Barrier to CPD

Continuing Professional Development (CPD) is vital for all teachers in supporting classroom practice, bringing contemporary science into the classroom and motivating students. The 'Rarely Cover' policy is designed to raise standards by freeing up teachers and headteachers from tasks that do not require their skills and expertise.

According to guidance on Teachernet, teachers should "cover only rarely, for absences which are not foreseeable."* This is designed to manage cover which is required because of unplanned events such as sickness. Scheduled time out of school for CPD does not come under the umbrella of 'Rarely Cover', with proper planning rarely cover should not affect teachers' availability for CPD. This provides the opportunity for schools to schedule dedicated time for high quality CPD, benefiting staff and students alike.

The network of Science Learning Centres is supporting schools and colleges in

accessing exciting and innovative CPD by offering Impact Award bursaries on many of the courses. If you teach at a National Challenge schools all courses at the regional Centres are eligible for an Impact Award.

The Department of Children School and Families (DCSF) has funded Impact Award bursaries of £200 per day for teachers and lecturers at maintained schools and colleges in England, and £100 per day for technicians to help pay for CPD. Course fees are typically only £130 per day for teachers and lecturers, and £95 for technicians, so the Impact Award will pay for your fees and also contribute towards your other costs. For more information visit: www.slcs.ac.uk/network/impactreward

All courses at the National Science Learning Centre are eligible for ENTHUSE Awards. This bursary is designed to cover your course fees, supply cover for the duration of the course, travel, accommodation in our high quality residential facilities and all your meals and refreshments during your stay. It will also include a small amount of money to help you implement your ideas once you arrive back in the classroom. For more

information visit: www.slcs.ac.uk/national/enthuse Applying for either bursary is a straight forward process. All you have to do is to complete a form to identify the impact of your intended course.

By offering bursaries for courses the network of Science Learning Centres recognises the value and impact that high quality CPD can have for staff and students, making access to support and development a priority for teaching professionals.

Further information about the 'Rarely Cover' policy can be found on the TDA and Teachernet websites.

*School Teachers Pay and Conditions Document 2009. Taken from <http://www.teachernet.gov.uk/management/payandperformance/pay/>

IMPACT AWARD

ENTHUSE Award