



# NEWSLETTER

Summer Term 2014

## A new approach to Science CPD in Norfolk & Suffolk

Since autumn 2013 the organisation and coordination of Science Learning Centre courses has changed with the Introduction of 50 new Science Learning Partnerships across the UK. One of these new partnerships is the **Norfolk & Suffolk Science Learning Partnership (SLP)** in the UK Central Region.

We all agree that Science Learning Centre courses are fantastic both in terms of value and impact in the classroom. This aspect has not changed. However, courses are now managed, coordinated and delivered locally. Schools across Norfolk & Suffolk have the opportunity to influence CPD programmes making courses more relevant and accessible to their institutions. Led by Bury St Edmunds County Upper School, the Norfolk & Suffolk SLP has already seen great support from schools and teachers across the two counties. Wymondham College have been highly supportive as Norfolk county lead for the partnership and the spring term saw enthusiastic uptake for the courses on offer. It was very promising to see so many outstanding science teachers across all phases attend the 'Leading & Delivering Effective Professional Development' courses. With all the current changes taking place, another course that proved incredibly popular was 'Preparing for the new primary curriculum' which is also being run again in the summer term. Other successful courses included, enhancing literacy skills and preparing for linear assessment. **If you are interested in the development and / or delivering SLP courses that meet local needs please contact: Mark Bruhin**  
**E Mail: [mbruhin@beacon-east.co.uk](mailto:mbruhin@beacon-east.co.uk) Tel: 07766 056330**

### Overview of courses - summer term 2014

Date	Course	Leader	Venue
25th April <b>Fully Booked</b>	Preparing for the new primary science curriculum	Claire Seeley	John Innes Centre, Norwich Research Park
28th April	Effective preparation for examinations	Alan Denton	Thomas Gainsborough School, Sudbury
11th June	Leading & Delivering Effective Professional Development	Alan Denton	Bury St Edmunds County Upper School, Suffolk
12th June	Leading & Delivering Effective Professional Development	Alan Denton	Wymondham College, Norfolk
12th June	Preparing for the new primary science	Claire Seeley	Suffolk One College, Ipswich, Suffolk
16th –17th June and 9th –10th July	Physics for non-specialists	Alan Denton	Bury St Edmunds County Upper School, Suffolk
27th June	'Metals & Me' CPD Event	Mark Bruhin	EMR Recycling Centre, Newmarket, Suffolk
27th June	Technicians supporting practical work in the classroom	Helen Jackson / Stephanie Shaw	Wymondham College, Norfolk
27th June	Enhancing literacy skills in secondary science	David Shakespeare	Bury St Edmunds County Upper School, Suffolk
30th June	EDF Energy & Sizewell B CPD Event	Mark Bruhin	Sizewell B Power Station, Leiston, Suffolk
1st July	Progress & attainment in science	Alan Denton	Kesgrave High School, Ipswich, Suffolk
7th July	Mathematics in science teaching	Alan Denton	Notre Dame High School, Norwich
10th July	Primary science outdoors. Moving from enquiry to working scientifically outside the classroom	Claire Seeley	Suffolk Wildlife Trust, South Lopham, nr Diss, Suffolk

# New Science CPD programmes for Primary, Secondary, Post-16 and Technicians

## Making CPD Affordable



We recognise the demand on Science teachers and this continuing professional development (CPD) programme is specifically designed to support you. Working with high calibre partners, our expert professional development team is ready to help you provide the very best science education for your students. We offer a range of courses and programmes to meet primary, secondary and post-16 science CPD needs. In order to make professional development affordable we offer bursaries (known as Impact Awards and provided by the Department for Education) for all of the courses in this leaflet. The bursaries can be used to contribute towards covering the cost of CPD fees, expenses and resources.

Anyone involved in science education from a state funded school or academy in England may be eligible for an Impact Award to contribute towards the cost of participating in CPD delivered through the network of Science Learning Centres. Schools, academies and colleges involved in bespoke CPD or outreach CPD for a cluster of schools may also be eligible.

**For further information about Impact Awards please visit:**

[www.slcs.ac.uk/go/net/impactawards](http://www.slcs.ac.uk/go/net/impactawards)

**Ways to book on a course:** . When you know which course you would like to apply for, click on the bold booking hyperlink at the bottom of each course and click to load the page and complete your details. This will be sent automatically to our admin team who will confirm your booking by email. You will then be sent further details two weeks before the course. If you require assistance please email

**Julie Smith: [jsmith@bsecus.org](mailto:jsmith@bsecus.org)**

**Phone: 01284 754857**

**Bury St Edmunds County Upper School**

**Science Learning Partnership Lead School**



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## Effective Revision & exam techniques

**Course Presenter:** Alan Denton

Some students struggle to pass science exams that are important for their future prospects in a diverse range of careers. Learning how to organise and summarise a large body of information, appreciating the value of practical work and understanding timing and exam technique, should underpin successful preparation for examinations and produce the confidence and independence required when taking examinations. This course will support you in developing effective strategies for supporting your students as they prepare for examinations.

You will be able to:

- **consider theories of learning in young people and adults**
- **review the most common problems that students have with study skills and retention of information**
- **describe different models of revision courses e.g. accelerated learning, individual learning plans, prioritising difficult topics and continuous revision blocks**
- **start to plan schemes of learning and the resources required to support it**
- **identify other CPD**

**Ideal for:** Heads of science, secondary teachers and post-16 teachers

**Age group:** 11 – 19 years

**Duration:** Twilight (4.15 pm – 5.45 pm)

**Date:** 28th April 2014

**Venue:** Thomas Gainsborough High School, Sudbury

**Course fee:** £70

**Impact Award:** 50%

**Code:** RC211 E01

**To book, click on the code: [RC211 E01](#)**

**BEACON east**

# Science courses available this term

## Leading & Delivering Effective Professional Development in Science Education

**Course Presenter:** Alan Denton

Effective leaders of professional development need to create a culture where teacher learning is valued and effective. Planning a programme for a department, school, college or cluster begins with effective needs analysis. It demands an understanding of the underpinning policies and practices and the skills required to deliver high-quality, relevant professional development. This course will help you to identify the principles, strategies and resources that can be used to develop a programme that is valued by colleagues and demonstrates impact in the science classroom. There will be opportunities for follow on supported learning in school.

You will be able to:

- **conduct appropriate needs analysis for all staff in the context of relevant frameworks e.g. Ofsted, local authorities**
- **plan a programme to meet these needs which draws on a range of professional development approaches and resources**
- **identify the particular needs of adult learners and know how to address this**
- **evaluate professional development and assure its impact**

<b>Ideal for:</b> Heads of science, primary and secondary teachers, post-16 teachers and technicians
<b>Age group:</b> 3 - 19 years
<b>Duration:</b> 1 day (9.00 am—3.30 pm)
<b>Date:</b> 11th June 2014
<b>Venue:</b> Bury St Edmunds County Upper
<b>Course fee:</b> Free
<b>Code:</b> RC204 E04

## Leading & Delivering Effective Professional Development in Science Education

**Course Presenter:** Alan Denton

Effective leaders of professional development need to create a culture where teacher learning is valued and effective. Planning a programme for a department, school, college or cluster begins with effective needs analysis. It demands an understanding of the underpinning policies and practices and the skills required to deliver high-quality, relevant professional development. This course will help you to identify the principles, strategies and resources that can be used to develop a programme that is valued by colleagues and demonstrates impact in the science classroom. There will be opportunities for follow on supported learning in school.

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<b>Ideal for:</b> Heads of science, primary and secondary teachers, post-16 teachers and technicians
<b>Age group:</b> 3 - 19 years
<b>Duration:</b> 1 day (9.00 am—3.30 pm)
<b>Date:</b> 12th June 2014
<b>Venue:</b> Wymondham College, Norfolk
<b>Course fee:</b> Free
<b>Code:</b> RC204 E05

To book, click on the code : [RC204 E04](#)

To book, click on the code : [RC204 E05](#)



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# Science Courses available this term

## Preparing for new primary science curriculum

**Course Presenter:** Claire Seeley

On this course you will discuss the new primary science Curriculum and explore the key issues arising and implications of the changes. You will be given time and support to consider how to lead staff in reviewing teaching and learning in science in your school. You will explore how to audit and adapt current schemes of work to accommodate the new Curriculum.

You will be able to:

- describe key changes in the new curriculum and identify the implications for your school
- plan for curriculum change
- describe attributes of successful teaching and learning in science relating to the new Curriculum
- evaluate ways of embedding the new Curriculum

**Ideal for:** Primary teachers, science coordinators/leaders, ASTs or SLEs, NQTs

**Age group:** 3 - 11 years

**Duration:** 1 day (9.00 am—3.30 pm)

**Date:** 12th June 2014

**Venue:** Suffolk One College, Ipswich

**Course fee:** £185

**Impact Award:** 50%

**Code:** RC104 E04

To book, click on the code : [RC104 E04](#)

## Physics for Non Specialists

**Course Presenter:** Alan Denton

This course is suitable for teachers who are relatively inexperienced in teaching physics, or those looking to extend their skills and update their strategies. It will focus on developing your understanding of key physics principles and the skills and strategies needed to teach physics effectively at 11-16 years. The use of stimulating practical activities and demonstrations will be explored, along with ICT-based resources.

You will be able to:

- increase your understanding of physics topics at 11-16
- become more confident and competent in your teaching of physics at 11-16
- develop an understanding of common student misconceptions and how these can be addressed
- employ the effective use of scientific models relevant to the teaching of physics
- rehearse opportunities for practical work and the use of ICT-based activities
- teach the mathematical aspects of physics with greater confidence

**Ideal for:** Secondary teachers, heads of science and NQTs

**Age group:** 11—19 years

**Duration:** 4 days (9.00 am—3.30 pm each day)

**Date:** 16th & 17th June and 9th & 10th July 2014

**Venue:** Bury St Edmunds County Upper School

**Course fee:** £740

**Impact Award:** 50%

**Code:** RC208 E01

To book, click on the code: [RC208 E01](#)



# Science Courses available this term

## Technicians supporting practical work in the classroom

**Course Presenters:** Helen Jackson & Stephanie Shaw

Technicians at all stages of their careers continue to broaden the role they perform. In many cases this now includes supporting teachers and students directly with practical work, for example assisting teachers with individuals in class practicals, demonstrations or helping students with project work. This course has been developed for technicians who are interested in exploring the possibilities of undertaking this role. The course includes sessions on what makes good practical work, working effectively with teachers and students, assisting with practical project work, managing small group work and individuals with practical activities.

You will be able to:

- describe, evaluate and apply effective strategies for working with teachers and students in practical work
- work towards implementing the new skills and knowledge acquired on the course
- build your confidence in working with teachers, students and practical activities

<b>Ideal for:</b> Technicians
<b>Age group:</b> 11–19 years
<b>Duration:</b> 1 day (9.00 am–3.30 pm)
<b>Date:</b> 27th June 2014
<b>Venue:</b> Wymondham College, Norfolk
<b>Course fee:</b> £185
<b>Impact Award:</b> 50%
<b>Code:</b> RC600 E01

To book click on the code: [RC600 E01](#)

## Enhancing literacy skills in the secondary science curriculum

**Course Presenter:** David Shakespeare

This course will support you in responding to the increased literacy demands in examinations and help to provide students with the skills to be effective, independent learners. Developing effective writers is underpinned by a range of literacy skills, including making good use of talking and reading. You will have the opportunity to reflect on your current practice and to consider further developments of your teaching. A range of strategies that can be easily implemented into teaching will be introduced.

You will be able to:

- describe what constitutes effective teaching and learning with respect to literacy
- use an increased repertoire of teaching and learning strategies to enhance students' literacy skills
- identify the contexts in which students will use exploratory talk and active reading strategies
- reflect on the barriers to good writing
- demonstrate an awareness of the range of writing styles required in science and how they can be developed

<b>Ideal for:</b> Heads of science, secondary teachers
<b>Age group:</b> 11–19 years
<b>Duration:</b> 1 day (9.00 am–3.30 pm)
<b>Date:</b> 27th June 2014
<b>Venue:</b> Bury St Edmunds County Upper School
<b>Course fee:</b> £185
<b>Impact Award:</b> 50%
<b>Code:</b> RC212 E02

To book click on the code: [RC212 E02](#)



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# Science Courses available this term

## 'Metals and Me' Teacher CPD Event

Using metal recycling as a context for learning in secondary science & geography.

Exciting professional development opportunity open to science and geography teachers providing brand new resources supporting KS 3- 5

The BMRA (British Metals Recycling Association) and EMR (global leader in metal recycling) have come together to offer a professional development day for teachers of Science and Geography to launch new resources.

The east region event will:

- **Explore the scientific process employed in metal recycling including dense media separation and eddy-current technology**
- **Demonstrate these processes in action through a recycling site tour**
- **Illustrate the positive, global environmental impact of waste metal recovery**
- **Introduce Metals & Me resources a video based teaching resource for use in Science and Geography at Key Stages 3, 4 & 5.**

Metals & Me resources have been created by teachers for teachers. Resources include notes on curriculum applications, suggestions for using the video modules, wall chart and PowerPoint presentations, six exemplar lesson plans, and details of useful websites

**Ideal for:** Secondary / college science and geography teachers

**Age group:** KS3,4 and 5

**Duration:** 1 day (9.00 am—3.00 pm)

**Date:** 27th June 2014

**Venue:** EMR Recycling Centre, Newmarket, Suffolk

**Course fee:** £60 (no impact award)

**Code:** Beacon East 1

To book click on the code: [Beacon East 1](#)

## EDF Energy & Sizewell B Power Station Careers & Curriculum Support Event

In partnership with EDF Energy; this CPD event will allow teachers and advisers to visit Sizewell B and gain invaluable information for young people looking to work in the energy and engineering sectors. Located near Leiston on the Suffolk Coast, Sizewell B is the UK's only commercial pressurised water reactor (PWR) power station.. The power station is currently operated by EDF Energy. EDF is one of the UK's largest energy companies and the largest producer of low-carbon electricity. For further information on EDF Energy go to [www.edfenergy.com](http://www.edfenergy.com)

This event will allow teachers and advisers to visit Sizewell B to not only learn about the power station but EDF Energy careers and curriculum support. EDF has supported schools and colleges across the UK for many years and this event will provide information on the latest opportunities for your students. This event will cover many areas including:

- **EDF Energy company overview**
- **Overview of Sizewell B Power Station and plans for new Sizewell C**
- **EDF Energy careers, including apprenticeship & graduate opportunities**
- **EDF Energy Environment**
- **Extensive Sizewell B site tour**
- **Further links, including curriculum support, student visits and the Sizewell B visitor/ education centre**

**Ideal for:** Secondary / college science, engineering, technology and geography

**Age group:** KS3,4 and 5

**Duration:** 1 day (9.00 am—1.00 pm)

**Date:** 30th June 2014

**Venue:** Sizewell B Power Station, Leiston, Suffolk

**Course fee:** Free

**Code:** Beacon East 2

To book click on the code: [Beacon East 2](#)

# Science Courses available this term

## Progress & attainment in science

**Course Presenter:** Alan Denton

In response to high demand from schools, this course is for teachers wishing to improve their students' progress and attainment in science.

You will explore a variety of approaches to measuring and demonstrating student progress in their scientific knowledge, understanding and skills. The course includes workshops on SOLO taxonomy, using data for effective progression and overcoming common barriers. You will consider the latest research into teaching strategies which impact most on student learning and take away ideas to develop students' independence and self-evaluation.

You will be able to:

- **consider high impact strategies to identify and improve progress in science**
- **develop your understanding of how to use quantitative and qualitative data to effectively track the progress of your students**
- **explore the use of a range of strategies which support progress in science**

**Ideal for:** Heads of science, secondary teachers

**Age group:** 11–19 years

**Duration:** 1 day (9.00 am–3.30 pm)

**Date:** 1st July 2014

**Venue:** Kesgrave High School, Ipswich

**Course fee:** £185

**Impact Award:** 50%

**Code:** RC213 E01

**To book click on the code:** [RC213 E01](#)

## Mathematics in science teaching

**Course Presenter:** Alan Denton

This course explores the use and failure to use mathematics in science. It looks at typical weaknesses in mathematics that hinder students' ability to understand and solve scientific problems and at pedagogies that can be used to address these difficulties. Teachers who struggle with teaching mathematical aspects of science will come away with easy to apply classroom strategies. Simple examples using software for visualisation of equations and use of scientific data will be shown, mathematics in science resources for schools will also be explored.

You will be able to:

- **appreciate how weaknesses in understanding mathematics can lead to difficulty in understanding science**
- **identify pedagogies to address these weaknesses**
- **understand how mathematics is used to make simple descriptions and predictions in science and how this might be supported by software examples**
- **access mathematics in science resources**

**Ideal for:** Heads of science, secondary teachers

**Age group:** 11–19 years

**Duration:** 1 day (9.00am–3.30pm)

**Date:** 7th July 2014

**Venue:** Notre Dame High School, Norwich

**Course fee:** £185

**Impact Award:** 50%

**Code:** RC210 E01

**To book, click on the code:** [RC210 E01](#)



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# Science Courses available this term

## Teaching primary science outdoors

### Moving from enquiry to working scientifically outside the classroom

**Course Presenter:** Claire Seeley

In response to high demand from schools, this course is for teachers.

This popular course will give practical advice on how to plan exciting and inspiring investigations that can be carried out beyond the classroom. You will consider how these opportunities can develop children's science enquiry skills. You will explore and evaluate a range of resources and consider how best to use your school grounds and surrounding areas to teach science.

You will be able to:

- Use a variety of learning environments to identify opportunities to enhance the teaching of science
- Plan safe and stimulating activities that take place outside the classroom
- Use a variety of resources to engage children in outdoor learning

<b>Ideal for:</b> AST's, primary teachers, science coordinators
<b>Age group:</b> 3–11 years
<b>Duration:</b> 1 day (9.00 am–3.30 pm)
<b>Date:</b> 10th July 2014
<b>Venue:</b> Suffolk Wildlife Centre, nr Diss
<b>Course fee:</b> £185
<b>Impact Award:</b> 50%
<b>Code:</b> RC111 E01

## Future Course Development

The science learning centre has a large catalogue of courses that we can provide in the region.

Listed below is just a flavour of potential courses

- Developing the role of the science subject leader
- Assessment and Progression in primary science
- Developing subject understanding in primary science
- Linking the core subjects in the Primary Curriculum
- Getting to grips with A level Biology/ Physics/Chemistry
- Active approaches to teaching A level
- Masterclass in A level teaching
- Technicians - An introduction to the role
- Senior Technicians— Leadership and Management
- Triple Science
- Developing thinking skills
- Behaviour Management in Science

Let us know if any of these courses are of interest. We can either run them as **bespoke courses** for your department OR School Cluster on a **PD DAY** or look to run them in a school near you.

**For enquiries please email: [npayne@bsecus.org](mailto:npayne@bsecus.org)**

book click on the code: [RC111 E01](#)



**Monday 23rd June**

**4.00pm - 6.00pm**

**Bury St Edmunds County Upper School,  
Beetons Way, Bury St Edmunds, Suffolk IP32 6RF**

## **What is a Teachmeet?**

It is an informal and enjoyable gathering of those curious about teaching and learning. Anyone can share great ideas they've trialled in their classrooms, a teaching resource they love, a great website, a classroom activity - whatever you like! You can ask questions or simply turn up to soak up all the great ideas and enthusiasm. It is about being engaged and inspired by our immediate colleagues and gaining a lot of networking to boot!

## **What can you do?**

You can come along to chat, listen, or meet new people. Or if you want to present you can sign up to do a 5 minute micro-presentation in a format of your choice. You do not have to present but please sign up or email and let us know if you are a willing talker or a lurker.

## **Telling Others**

Please tell other science teachers about the event. If you've been to a TeachMeet before, aim to bring along someone who hasn't.

Please sign up either to present, or simply be inspired, so that we know approximate numbers for refreshments.

Please sign up by visiting :

<http://teachmeet.pbworks.com/w/page/79304840/Bury%20St%20Edmunds%20Teachmeet>



