

Gloucestershire, Wiltshire & Greater Bristol Science Learning Partnership Secondary Science CPD

Programme of courses 2023 - 2024





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Gloucestershire, Wiltshire and Greater Bristol Science Learning Partnership



Our Gloucestershire, Wiltshire and Greater Bristol Science Learning Partnership provides quality, subject-specific continuous professional development (CPD) for primary and secondary teachers across the region. We are part of a network of SLP's managed by STEM Learning.

Odyssey Teaching School hub holds the contract for the Science Learning Partnership. By working closely with our partners, we can organise courses that YOU want, that will benefit YOUR teachers and science technicians.

Our aim is to support school leads, teachers and technicians to develop high-quality science and STEM provision for all young people in schools and colleges locally, from primary through to A Level. We offer face to face courses through the academic year, and can also help with bespoke training solutions and one to one support.

Some programmes can attract a bursary, such as the Impact Award. This means that a reduced price can be offered, making the courses incredibly good value for money.

If there is a specific need within your school, it is possible to arrange a bespoke course. Please contact us to discuss which programmes may be of interest – again these can be a cost-effective way to ensure your staff are receiving the best training possible.

SLP secondary Lead –Steve Hacker -Steve.hacker.nes@live.com SLP primary lead –Angela Marsh angela@adfecto.org.u SLP Admin contact details- sciencehub@adfecto.org.uk





Secondary Science CPD and network packages

Stem Learning runs a well- established and successful face to face and remote continuing professional development program. Attendees benefit from highimpact, DfE supported CPD that makes a proven difference to students' engagement and attainment in STEM subjects.

Why Subscribe?

Being a member of a Science Learning Partnership package gives teachers the opportunity to collaborate with other schools and share expertise and good practice. We have a broad range of packages listed below including subject knowledge enhancement, teaching, and learning and SEND. By signing up for these package networks you can attend 5 sessions through the year and engage in CPD. Delivered as remote twilights attending these network packages mean you won't need to take more time away from your classroom.

Our Science Learning Partnerships are also supported by teacher release payments. These TRP's can help to reduce the cost to your school by 50%. Your school will pay the full amount initially and then receive 50% of the fee back via BACS.



Teaching and Learning Network for ECT's



Virtual delivery

Open to all secondary science teachers and early career teachers, this network will enable you to engage in the latest research and developments in science education and will provide opportunities to collaborate and share best practice with other teachers across the region.

Sessions include:

Session 1 – Disciplinary knowledge in science

We have spent time sequencing substantive knowledge in the curriculum. This network explores how we can develop disciplinary knowledge over time.

Session 2 – Developing reading in science lessons

Reading will allow your pupils to understand more science and access assessment. This network is an opportunity to explore the research and develop practice.

Session 3- Retrieval and connecting learning in science.

DNA, retrieval roulette, what does the research say has impact on learning and why? This network will explore the neuroscience and how this can be effectively implemented.

Session 4 – Responsive teaching and next steps.

How can we use assessment for learning as an effective tool? This session looks at how we respond to in classroom assessments to move the learning forward

For further information or to enquire about funding please contact slpswwm@adfecto.org.uk

<u>Click here to book or for more</u> information



KEY DETAILS:

29 JANUARY 4 MARCH 10 JUNE 1 JULY 16 JULY



4pm - 5pm

Fee - £100.00+ VAT

Teacher release payment = \pounds 50.00 Cost to school = \pounds 50.00



Pedagogy Network Package

Virtual delivery

Designed to support the Stem Learning's secondary CPD courses and led by a highly experienced teachers of science, this network is an opportunity further develop and enhance your own pedagogy knowledge and acquire new teaching strategies to support your students and hence improve their outcomes.

These sessions are suitable for science teachers who are aspiring to leadership in the future or are currently leading science or key stage 3/4. The sessions will take place on the dates below and will explore the topics as listed below:

- Maths in Science
- Grappling with graphs
- Literacy in Science
- Effective use of multiple-choice questions
- Sequencing disciplinary knowledge effectively

Run online from 16:00 – 17:30 each session will also include time for coaching on areas which participants are finding tricky to implement.

For further information or to enquire about funding please contact <u>slpswwm@adfecto.org.uk</u>

<u>Click here to book or for more</u> <u>information</u>





KEY DETAILS:

1 FEBRUARY 14 MARCH 2 MAY 4 JULY 17 JULY

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4pm - 5.30pm

Fee - £150 + VAT

Teacher release payment = $\pounds75.00$ Cost to school = $\pounds75.00$



SEND Remote Workshop Package

Virtual delivery

This series of workshops is designed to support teachers of SEND and teaching assistants to maximise impact and progression for SEND learners that they teach or support.

The course

The programme introduces delegates to a range of practical strategies that they can take and use in their own settings for improving learning and progress of students with special educational needs. This course is suitable for teachers and teaching assistants from primary and secondary phases. Each session will cover a different topic delivered by Rob Butler who has over 20 years of teaching science in special schools. Topics include

- · SEND Meeting the needs of all learners
- Teaching resources available to support learning
- Specific SEND needs part 1 Autism & Moderate learning difficulties

•Specific SEND needs part 2 – Autism & Moderate learning difficulties

For further information or to enquire about funding please contact slpswwm@adfecto.org.uk

KEY DETAILS:

6 MARCH 17 APRIL 21 MAY

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4pm - 5pm

Fee - £120 + VAT

Teacher release payment = $\pounds 60.00$ Cost to school = $\pounds 60.00$



<u>Click here to book or for more</u> <u>information</u>



Subject Knowledge Enhancement Package

Virtual delivery

Are you new to teaching KS3 science, an ECT or a more experienced teacher? If so, then this network is designed to help you. Presented by a highly experienced science teacher you will find helpful nonjudgemental support to enhance your science subject knowledge, helping you understand tricky science concepts and giving you the confidence in the classroom. Each session focusses on a particular aspect of the KS3 science curriculum.

Delviered over 6 sessions covering 2 sessions on Biology, Chemistry and Physics topics include:

- Biology: Cell Biology, DNA and Cell division
- Physics: Energy and Forces
- Biology : The big picture- Respiration, Photosynthesis and Cycles
- Chemistry: The Periodic Table and Particle Theory
- Physics: Electricity and Magnetism
- Chemistry: Acids and Alkalis. Simple reactions

For further information or to enquire about funding please contact slpswwm@adfecto.org.uk

<u>Click here to book or for more</u> information



KEY DETAILS:

8 FEBRUARY 7 MARCH 18 APRIL 13 MAY 19 JUNE 11 JULY

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4pm - 5:30pm

Fee - £200 + VAT

Teacher release payment = £100 Cost to school = £100







Science SKE Remote CPD Programme

Click on the title to find out more

Biology

Biology: Cell Biology, DNA and Cell division 08 February 2024 - 16.00-17.30 £45.00

Chemistry

Subject knowledge enhancement:KS3 Chemistry 27 February 2024 - 16.00-18.00 £150.00

Subject Knowledge enhancement KS4 Chemistry 06 March 2024 - 16.00-17.00 £80.00

KS3 Biology The Big Picture - respiration, photosynthesis and cycles 18 April 2024 16.00-17.30 £45.00

<u>Chemistry the periodic table</u> 13 May 2024 16.00-17.30 £45.00

Subject knowledge enhancement: KS4 Chemistry 18 June 2024 - 16.00-17.00 £150.00

Subject knowledge enhancement : KS3 Chemistry 02 July 2024 - 16.00-17.00 £150.00

Maths In Science

<u>Grappling with Graphs</u> 01 February 2024 - 16.00-17.30 £45.00

Physics

Physics Remote Network- Magnetism and Electromagnetism 31 January 2024 - 15.30-16.40 £30.00

Physics Remote Network - Radioactivity 05 March 2024 - 15.30-16.40 £30.00

Physics Energy and forces 07 March 2024 - 16.00-17.30 £45.00

Physics Remote Network- Forces and Matter 24 April 2024 - 15.30-16.40 £45.00

<u>KS3 SKE - Physics: Electricity and Magnetism</u> 19 June 2024 - 16.00-17.30 £45.00

Physics remote Network- Particle Model 25 June 2024 - 15.30-16.40 £45.00





Secondary Science Remote CPD Programme

Click on the title to find out more

January

Disciplinary knowledge in science for ECT's 29 January 2024 - 16.00-17.00 £45.00

February

Formative assessment – planning to maximise learning 08 February 2024 - 15.30-16.30 £480.00

Narrowing the gap: Supporting disadvantaged learners in science 08 February 2024 - 16.00-17.00 £60.00

March

developing reading in science lessons 04 March 2024 - 16.00-17.00 £30.00

Diagnostic teaching & dealing with

misconceptions 07 March 2024 - 16.00-17.00 £90.00

Literacy in Science 14 March 2024 - 16.00-17.30 £45.00

Moving into Science Leadership

06 March 2024 - 14.00-15.30 £90.00

April

Planning and Delivering a Remote Science Lesson 17 April 2024 - 15.30-16.30 £100.00

May

Effective use of multiple choice questions 02 May 2024 - 16.00-17.30 £45.00

June

Diagnostic teaching & dealing with misconceptions 06 June 2024 - 16.00-17.00 £90.00

Retrieval and connective learning in science 10 June 2024 - 16.00-17.00 £45.00

July

Responsive teaching - the next steps 01 July 2024 - 16.00-17.00 £45.00

Sequencing disciplinary knowledge effectively 04 July 2024 - 16.00-17.30 £45.00





Remote CPD for Science Technicians

Technicians play and essential role in every science department. Our technicians cpd and networks combine CPD and science subject knowledge's as well as opportunities for discussion. open to all technicians these session will help you engage with the latest developments and provide you with the opportunity for collaboration and sharing best practice.

Click on the title to find out more

Spring Network Meetings

Technician network 23/24 - Spring 1 30 January 2024 - 13.30-15.00 £30.00

Technician network 23/24 - Spring 2 12 March 2024 - 13.30-15.00 £30.00

Spring Term

Technicians : Setting up your own STEM Club

06 February 2024 - 14.30-15.30 £90.00

Technicians : Maintaining your prep room

20 February 2024 - 14.30-15.30 £90.00

Maintaining your microscopes

07 March 2024 - 14.30-15.30 £40.00

Summer Network Meetings

Technician network 23/24 - Summer 1 14 May 2024 - 13.30-15.00 £30.00

Technician network 23/24 - Summer 2 02 July 2024 - 13.30-15.00 £30.00

Summer Term

Technicians: Health and Safety 10 April 2024 14.30-15.30 £60.00

<u>Technicians : Setting up your own STEM Club</u> 24 April 2024 - 14.30-15.30 £100.00

Technicians : Maintaining your prep room

11 June 2024 - 14.30-15.30 £100.00

Maintaining your microscopes

25 June 2024 - 14.30-15.30 £60.00

Gloucestershire and Wiltshire

For local technician CPD and networks please see the CPD pages for your area



Remote CPD for Post 16 Teachers



Click on the title to find out more

SKE for Level 3 BTEC Applied Science Unit 1 - Biology 05 February 2024 16.00-17.00 £150.00

New to teaching T level Science

28 February 2024 16.00-17.00 £120.00

SKE for Level 3 BTEC Applied Science Unit 1 - Chemistry 07 March 2024 16.00-17.00 £150.00

Preparing to Teach Level 3 BTEC Applied Science

14 March 2024 16.00-17.30 £150.00

Organic chemistry

27 March 2024 16.00-17.00 £45.00

SKE for Level 3 BTEC Applied Science Unit 1 - Physics

29 April 2024 15.30-16.40 £150.00

Post 16 Electrochemistry

16 May 2024 16.00-17.00 £30.00

SKE for Level 3 BTEC Applied Science Unit 1 - Biology

20 May 2024 16.00-17.00 £150.00

Maths for A level chemists



26 June 2024 16.00-17.00 £30.00



SEND Programme

We have a range of sessions designed for leaders, teachers and teaching assistants who support pupils with SEND. These sessions help to maximise impact and progression for SEND learners that they teach and support. All sessions offer a range of practical strategies to take back to the classroom and use in your own setting.

Click on the title to find out more

Supporting students with SEND in STEM subjects

08 February 2024 - 16.00-17.00 £90.00

SEND - Teaching resources available to support learning 06 March 2024 - 16.00-17.30 £45.00

SEND - Specific SEND needs part 1 - Autism & moderate learning difficulties 17 April 2024 - 16.00-17.30 £45.00

SEND - Specific SEND needs part 2 - Autism & moderate learning difficulties 21 May 2024 - 16.00-17.30

£45.00

Supporting students with SEND in STEM subjects

06 June 2024 - 16.00-17.00

£60.00





Stimulating Physics Network

The Stimulating Physics Network is a school-led network of 50 lead schools and over 350 partner schools.

Why become a Stimulating Physics Network partner school?

The main objective of the Stimulating Physics Network is to provide a world-leading education in physics to all young people by improving teaching and reinvigorating physics in schools, while aiming to increase participation and attainment across the subject, particularly for girls and other under-represented groups.

The network provides CPD, mentoring and coaching for physics departments and individuals, developed in collaboration with dedicated physics experts, including serving physics teachers and accredited professionals, which aims to enhance subject knowledge and pedagogical understanding to enable better impact in the classroom.

There is no cost to schools who wish to become a partner school.

As a partner school you will be assigned a dedicated school-based physics coach from within your locality.

Together you will identify your needs, the needs of your department and agree a targeted programme of support that will address many of the barriers to a comprehensive physics education.

Your coach will plan up to six sessions each year of CPD within the department and will signpost to other provision as appropriate.

Become a partner school express your interest by clicking <u>here</u>







STEM Ambassadors (primary and secondary)

STEM Ambassadors are adult volunteers that represent a spectrum of STEM professionals, students, apprentices, researchers and communicators. They are a valuable link between schools and industry, helping to bring STEM subjects alive and provide real-life examples of careers, and. They are an incredible resource for schools and colleges across the UK and can be requested, for free, to support any element of your STEM curriculum.

It's easy to <u>request a STEM Ambassador</u>. Just create an account or sign in to your STEM Learning dashboard, select 'Advertise an activity', fill in the details and publish your activity. It will be seen my many hundreds of potential volunteers who can express an interest in volunteering with you, and you can communicate with them directly through the website.

The programme is managed by STEM Learning, and funded by UK Research & Innovation. There is a network of Delivery Partners who coordinate volunteering opportunities and can support you with your request for volunteers.

For South West England

Contact: Graphic Science: Web: <u>https://www.graphicscience.co.uk/ste</u> <u>m-support/</u>. Email: <u>ambassadors@graphicscience.co.uk</u>

For West Midlands

Contact: Entrust Web: <u>https://www.entrust-</u> <u>ed.co.uk/services/stem-</u> <u>ambassadors</u>. Email: <u>stemambassadors@entrust-ed.co.uk</u>





Gloucestershire and Wiltshire Secondary Science local CPD Programme

Click on the title to find out more

Spring Term

Subject Knowledge Enhancement: KS3 Physics

07 February 2024 8.30-15.00 £200.00 The commonweal School, SN1 4JE

Science for low attainers - how to engage and

ensure progress 26 February 2024 9.00-16.00 £200.00 Cirencester Deer Park School, GL7 1XB

Maths in the secondary science curriculum: Graphs

07 March 2024 09.30-12.00 £200.00 The Pavilion, GL51 6PN

Subject Knowledge Enhancement: KS3 Chemistry

15 March 2024 08.30-15.30 £200 The Commonweal School, SN1 4JE

Active Learning Activities for Teaching Energy

Resources 19 March 2024 16.00-17.30 £80 Pates Grammar School, GL51 oHG

Networking Opportunities

Swindon & Wiltshire Science Subject leaders' network meeting 12 March 2024 15.00-17.30 - Remote

Swindon & Wiltshire Science Subject leader summer network meeting 18 June 2024 9.00-15.30 HardenHuish School, SN14 6RJ

Summer Term

Maths in secondary science curriculum: Algebra 08 April 2024 14.00-16.30 £200.00

Pates Grammar School, GL51 0HG

Chemistry subject knowledge enhancement for

non-specialists 25 June 2024 9.00-15.30 £400.00 Malmesbury School, SN16 0DF

Summer Term

Swindon & Wiltshire Technician meeting Package 11 March 2024 13.00-15.30 Malmesbury School, SN16 0DF

SWINDON & WILTSHIRE Technician network meeting

11 March 2024 13.30-16.00 Malmesbury School, SN16 0DF

Gloucestershire Technician network

14 March 2024 13.00-15.30 Denmark Road High School, GL1 3JN

Gloucestershire Technician network 07 June 2024 13.00-15.30 Sir Thomas Riches School, GL2 0LF

Swindon & Wiltshire Technician network meeting 10 June 2024 13.30-16.00

Malmesbury School, SN16 0DF



SLP secondary Lead –Steve Hacker -Steve.hacker.nes@live.com SLP primary lead –Angela Marsh angela@adfecto.org.uk SLP Admin contact details- sciencehub@adfecto.org.uk



CLEAPPS Training in Bristol

Click on the title to find out more

CLEAPSS Health and Safety for Science

Technicians 04/03/2024 9.00-16.00 £160.00

CLEAPPS Microbilogy - Antimicrobials

06 March 2024 09.00-16.00 £160.00

CLEAPSS Radiation protection supervisor

training 18/03/2024 9.00-16.00 £160.00

<u>CLEAPSS Safety examination on autoclaves</u> <u>and pressure vessels</u>

24/04/2024 9.00-15.30 £160.00

CLEAPSS Microbiology- Serial dilutions and

fungi 10/05/2024 9.00-16.00 £160.00

CLEAPPS Introduction to supporting

physics 07 June 2024 09.00-16.00 £160.00 CLEAPSS Supporting safe and successful classroom physics 11/06/2024 9.00-15.30 £160.00

LEAPSS Health and Safety for Science Technicians

12/06/2024 9.00-16.00 £160.00

<u>CLEAPSS preparation room management</u> <u>and health and safety for senior</u> <u>technicians</u> 13/06/2024 9.00-15.30 £160.00

CLEAPSS Radiation protection supervisor

training 03/07/2024 9.00-16.00 £160.00

CLEAPSS Safety with chemicals for science technicians 09/07/2024 9.00-15.30 £160.00

SLP secondary Lead –Steve Hacker -Steve.hacker.nes@live.com SLP primary lead –Angela Marsh angela@adfecto.org.uk SLP Admin contact details- sciencehub@adfecto.org.uk



Greater Bristol Secondary Science local CPD Programme

Click on the title to find out more

Spring term CPD

Maths in secondary science curriculum:

<u>Algebra</u>

11 March 2024 09.30-14.30 £200.00 The City Academy Bristol, BS5 9JH

Maths in the secondary science curriculum: Graphs

17 April 2024 09.30-14.30 £200.00 The City Academy Bristol, BS5 9JH

Engaging science for key stage 2

04 June 2024 9.00-15.30 £200 Bristol, TBA

Teaching A level biology for the first time

21 June 2024 9.30-16.00 £200 university of Bristol, BS8 1JA

Bristol Network Opportunites

Greater Bristol Subject leaders' network meeting

23 February 2024 9.00-15.30 £0.00 Ste Bedes Catholic College, BS11 0SU

Bristol Technician Network Meeting

13 March 2024 13.30-16.00 £85.00 University of Bristol, BS8 1JA

Greater Bristol Subject leaders' network

meeting 21 June 2024 9.00-15.00 £0.00 St Bede's Catholic College, BS11 0SU

Bristol Technician Network Meeting

03 July 2024 13.30-16.00 £85.00 university of Bristol, BS8 1JA

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Contact sciencehub@adfecto.org.uk

