London Connected Learning Centre

Supporting schools in digital strategies for learning

2016 -2017

Digital Strategy | Learning Technology | E-Safety | Computing

School Improvement | Professional Learning | Technical Solutions | Research

London Connected Learning Centre

Education Development Trust

Contents

Naace Impact Awards Winner

NETWORK OF EXCELLENCE COMPUTER SCIENCE TEACHING

Regional Training Center

LONDON GRID FOR LEARNING 2.0 RECOGNISED SUPPORT

CAS Regional Hub

ALT LEARNING TECHNOLOGIST OF THE YEAR AWARD 2012 Team Winner

Information, Advice and Guidance

Free to SLA Schools

Telephone and Email Advice

The CLC will endeavour to provide a telephone and email response service. However, if a query requires significant input, it must be taken as a consultation session. The CLC will advise when and if this applies.

Twitter

Keep up to date with CLC activities and join the ever-growing teaching community using social media to learn and share ideas, by following **@ldnclc** on Twitter. If your school has not yet joined the Twitter community, why not use one of your consultancy sessions to find out how to make the most of this very powerful marketing tool (see page 18).

New partnership with IntoFilm

Free CPD for SLA schools

The CLC is delighted to be partnering with IntoFilm to deliver a range of FREE film CPD to our SLA schools. Training sessions can be arranged in school or at the CLC, for a twilight session, half or full-day. If your school would like support in film-making, animation, film for literacy and curricular attainment or film as a starting point for discussions around wellbeing, anti-bullying and online safety contact the CLC to arrange a date and time. Materials and follow-up resources provided. For a full list of available sessions or to book please email Kim Morrison **kmorrison@londonclc.org.uk**

Pupil Workshops at the CLC

These practical workshops take place at the CLC's Clapham centre. The sessions are led by a CLC staff member but the class teacher is expected to take a leading role in teaching and organising the session. These activities have been designed with reference to the national curriculum programmes of study. Sessions have been split into specific support for delivery of the computing programmes of study and sessions to facilitate the use of technology to support cross-curricular learning.

Computing: Full-Day Workshops at the CLC

Robot Challenge Upper KS2

Curriculum links WO1

In this session, pupils will master writing and debugging programs with the new Lego EV3 robot whilst solving a series of complex problems.

Computing: Design, write and debug programs. Use sequence, selection, and repetition in programs. Use logical reasoning to predict the behaviour of simple programs

Lego WeDo Robots Lower KS2

Curriculum links WO2

Using the brand new Lego WeDo robots, pupils will build, program, investigate sensors and motors, and design a simple electronic device.

Computing: Design, write and debug programs. Use sequence, selection, and repetition in programs
Design & Technology: Design innovative, functional and appealing products

Digital Citizens: Understanding the Internet KS2

Curriculum links WO3

We are all are citizens of the internet. In the workshop pupils will learn how the internet works and will code their own webpage using HTML, the language of the world wide web.

Computing: Understand computer networks including the internet. Select, use and combine a variety of software (including internet services) on a range of digital devices. Collect, analyse, evaluate and present data and information
English: Elaborate and explain their understanding and ideas

Online Safety Interactive KS2

Curriculum links WO4

Pupils will better understand how to keep themselves and others safe online by creating a digital campaign to promote online safety, with a focus on social networking. On completion, pupils will receive DigitalMe's SAFE Certificate in Safe Social Networking.

Computing: Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable online behaviour, be discerning in evaluating digital content
English: Elaborate and explain their understanding and ideas

Challenge & Enrichment in Computing Upper KS2

WO5

For pupils who need more challenge in computing, this day will provide a series of extended activities focusing on computational thinking using text-based programming languages often taught at KS3 eg Python and Logic. The day will also introduce students to a variety of web-based resources and tools, to encourage independent learning online.
This is for groups of up to 8 pupils per school and will run on the following dates:

Please specify if you have a preference.

- **Friday 25 November**
- **Friday 19 May**
- **Friday 16 June**

Problem Solving with Scratch KS2

Curriculum links

WO6

Pupils will use their higher-order thinking skills to solve a series of mathematical problems in Scratch. Pupils will explore key age appropriate mathematical concepts. Schools doing this workshop after January 2017 will use resources from the ScratchMaths project (find out more at scratchmaths.org).

Computing: Use logical reasoning and analyse problems in computational terms
Maths: Reason mathematically and solve problems

Raspberry Pi & Minecraft KS2

Curriculum links

WO7

Pupils will become computer scientists for the day. They will design and build Raspberry Pi computers before programming them with Minecraft.

Computing: Design, write and debug programs. Evaluate and apply information technology analytically to solve problems
Science: Construct a simple series electrical circuit
Design & Technology: Generate, develop, model and communicate

Computing: Half-Day Workshops at the CLC

Games Design with 2Simple's 2DIY KS1

Curriculum links WHO1

During this session pupils will become games developers, designing and creating their very own computer games using 2Simple's 2DIY platform.

Computing: Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content
Art and Design: Creatively design and make products

Coding & Animation with Scratch Jr KS1

Curriculum links WHO2

This session showcases MIT's visual programming app, Scratch Jr, and allows pupils to create their own interactive animations.

Computing: Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content
English: Elaborate and explain their understanding and ideas

Robots & Computing KS1

Curriculum links WHO3

Pupils will create algorithms to control floor robots in order to complete a set of geometric challenges.

Computing: Understand what algorithms are. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs

Understanding Networks & the Internet KS2

Curriculum links WHO4

In this session pupils will develop an understanding of computer networks, the internet and the world wide web by completing a range of exciting challenges.

Computing: Understand computer networks including the internet. Understand how networks can provide multiple services, such as the world wide web. Recognise the opportunities that networks offer for communication and collaboration

Robot Challenge KS2

Curriculum links WHO5

In this half-day session pupils will master writing and debugging programs using age-appropriate Lego robots, while solving a series of challenges.

Computing: Design, write and debug programs. Use sequence, selection and repetition in programs. Use logical reasoning to predict the behaviour of simple programs

Problem Solving with Scratch KS2

Curriculum links WHO6

Pupils will use their higher-order thinking skills to to solve a series of mathematical problems in Scratch. Pupils will explore age-appropriate mathematical concepts.

Computing: Use logical reasoning and analyse problems in computational terms
Maths: Reason mathematically and solve problems.

Cross-Curricular: Full-Day Workshops at the CLC

City Planning in Minecraft KS2

Curriculum links **WO8**

In this session pupils will work collaboratively to design and build their own Minecraft city. After the session a 3D printed miniature model of the pupils' design will be sent to the school.

Geography: Understand human geography, including settlements and land use
Computing: Be confident and creative users of ICT
Design & Technology: Research and develop design criteria to inform design

Robot Orchestra Maker Day KS2

Curriculum links **WO9**

Pupils will extend their knowledge of circuits by designing, building and programming their own electronic orchestra. They will have an exclusive opportunity to use the BBC's new Micro:bit, thanks to our partnership in the BBC's Make IT Digital initiative. ***These workshops are offered in the following weeks only: Monday17- Friday 21 October and Tuesday 2 - Friday 5 May.***

Science: Construct a simple series electrical circuit, identifying and naming its basic parts
Design & Technology: Design innovative, functional and appealing products, apply their understanding of computing to program, monitor and control their products

Geography & Habitats KS2

Curriculum links **W10**

KS2 pupils will explore different localities and regions using Google Earth, Maps and even virtual reality, and will discuss the ways in which plants and animals have adapted to live in particular habitats. They will then explore simulations of these habitats in Minecraft and produce an environmental factsheet based on their findings.

Geography: Develop knowledge about the world, the UK and the locality. Understand geographical similarities and differences of different regions. Interpret geographical information from maps and photographs
Science: Identify and name a variety of living things in their local and wider environment. Identify how animals and plants are adapted to suit their environment
Maths: Describe positions on a 2-D grid as coordinates

Digital Music with Sonic Pi Upper KS2

Curriculum links W11

Pupils will develop an understanding of musical composition and computer science by using the free Sonic Pi software to program a piece of music. Sonic Pi allows pupils to explore the key dimensions of music, from pitch and duration to dynamics and tempo, whilst mastering core ideas of computing, such as loops and variables.

Music: Use technology appropriately. Use and understand staff and other musical notations. Compose music using the inter-related dimensions of music
Computing: Design, write and debug programs. Use sequence, selection and repetition in programs. Use logical reasoning to predict the behaviour of simple programs

Cross-Curricular: Half-Day Workshops at the CLC

Performing & Recording Poetry KS2

Curriculum links WHO7

This half-day workshop for KS1 or KS2 classes will give children the opportunity to prepare, recite and perform poetry and to create their own poetry audio recordings, which can be shared on school blogs and social media.

English: Prepare poems to read aloud and perform, showing understanding through intonation, tone, volume and action. Learn poetry by heart. Listen to and discuss a range of poems. Recognise some different forms of poetry
Computing: Be confident and creative users of ICT

Exploring the World with Digital Maps KS1

Curriculum links WHO8

Pupils will use Google Earth, Streetview and Maps to visit locations from each of the world's seven continents, making observations and comparisons between them.

Geography: Understand geographical similarities and differences between UK and non-European locations. Name and locate the world's seven continents. Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features

Science: Plants & Natural Things KS1

Curriculum links WHO9

Pupils will observe, investigate and explore plant life. Using photography, data loggers and microscopes they will work scientifically to answer questions based around plants and growth.

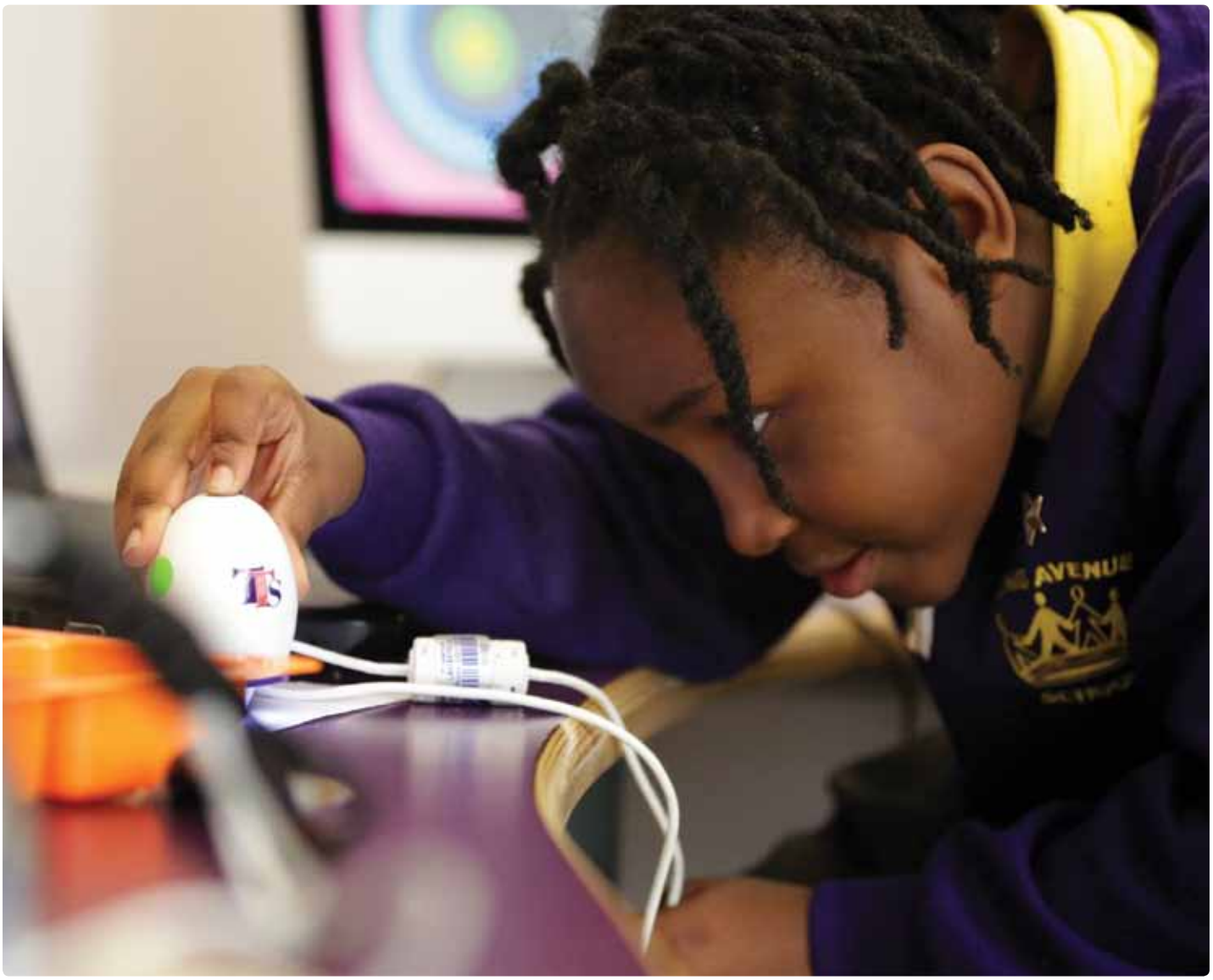
Science: Identify and name a variety of common wild and garden plants. Compare and contrast familiar plants. Describe how to identify and group them. Find out and describe how plants need water, light and a suitable temperature to grow
Computing: Be active participants in a digital world and be confident and creative users of ICT

Patterns, Shape & Form in Rocks & Soils Lower KS2

Curriculum links WH10

Pupils will make systematic and careful observations and group and classify rocks and soils. They will examine textures, shape and hidden patterns using digital microscopes and then create their own digital compositions based on their findings.

Science: Record and communicate scientific findings. Compare and group together different kinds of rocks on the basis of appearance and simple physical properties. Recognise that soils are made from rocks and organic matter
Computing: Be active participants in a digital world and be confident and creative users of ICT



In-School Workshops

These in-school sessions bring some of the CLC workshops into your school. Some sessions are designed so that the class teacher can work alongside a CLC tutor and others require small groups of children to be taken out of class to work on a specific task. For these sessions, it would be beneficial if a teaching assistant could support the CLC tutor to ensure that work can integrate into school practice.

Some of these sessions may require the download of specific software onto school machines. Sessions cannot run if the necessary freeware is not installed and tested on the school system. All workshops must be booked as full-days.

Investigating the World EYFS

Curriculum links **WI01**

Our experienced tutors will work in your EYFS setting to use digital technologies to support children's learning in understanding and communicating about the world. Using microscopes, cameras or recording devices on loan from the CLC, the tutor will help young children observe, research, reflect and create. This session should link to your current theme or topic and should be used in conjunction with a CLC equipment loan (see page 24) as a starting point for practitioners to build on.

The World: Notice detailed features of objects in their environment. Can talk about some of the things they have observed
Technology: Know how to operate simple equipment. Be able to select and use technology for particular purposes

Coding & Animation with Scratch Jr KS1

Curriculum links **WI02**

This session showcases MIT's visual programming app, Scratch Jr, and allows pupils to create their own interactive animations.

Computing: Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content
English: Elaborate and explain their understanding and ideas

Computing Unplugged KS1

Curriculum links **WI03**

CLC tutors will work with multiple classes (three or four in a day) to teach your KS1 pupils the key concepts of computer science, without ever touching a keyboard or tapping a tablet. We will explore ideas like algorithms, debugging and using logical reasoning, through a series of games and whole class activities. A large space (eg. the hall) will be required.

Computing: Understand what algorithms are. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs

Online Safety: Pupil Voice Upper KS2

Curriculum links WI04

Using your school's online safety policy as a starting point, a CLC film-maker will work with members of school council or your Digital Leaders to create a short film to explain the key content of the policy to the wider school community. The day will combine discussion on good online safety practice, with the afternoon spent creating a short film that can be uploaded to the school's website. (This session is designed for small groups only.)

Computing: Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable online behaviour. Be discerning in evaluating digital content
English: Elaborate and explain their understanding and ideas

Problem Solving with Scratch KS2

Curriculum links WI05

Pupils will use their higher-order thinking skills to to solve a series of mathematical problems in Scratch. Pupils will explore key age appropriate mathematical concepts. Schools doing this workshop after January 2017 will use resources from the ScratchMaths project (find out more at **scratchmaths.org**).

Computing: Use logical reasoning and analyse problems in computational terms
Maths: Reason mathematically and solve problems

Special Projects

The CLC has developed a number of mini projects collaborating with local arts, cultural and business partners. Each project requires a different allocation of your SLA entitlement. Please check carefully before booking. Demand is expected to be high and places will be offered on a first come, first served basis. If you have any questions about these projects please contact Kim Morrison **kmorrison@londonclc.org.uk**

IBM Robo Challenge 2017

IBM

Tenth Anniversary

The IBM Robo Challenge is in its tenth year. Beginning in 2007 the challenge has worked with just under 1,000 pupils from 90 schools across Lambeth and Southwark. The initiative won the 2015 Lord Mayor's Award for Education and Lifelong Learning. The tenth challenge invites nine schools to put forward a small team of students (about six per school) from Years 5 and 6 to come together to take part in a competitive programming day using Lego NXT and its software. The school must commit to establishing a group of children to take part in the competition. These pupils will be supported by IBM mentors. The final event, on a Saturday in March, is fun, challenging and very rewarding. The pupils will be put through their paces with a series of challenges including programming robots to dance, racing and navigating a predetermined route, and presenting the team's strategy to an unfamiliar audience. Although only a small number compete in the event, whole-class activity can be done in preparation. In order to take part, schools would need to commit the following from their SLA entitlement:

1 x CLC twilight
1 x Lego loan
1 x full-day workshop either in school or at the CLC (optional)

Please note: the Robo Challenge will be heavily subscribed. Priority will be given to schools that have not been involved previously.

Digital Leaders' Programme

PhilVR & TateEX

Free to SLA Schools

philharmonia orchestra

SOUTHBANK CENTRE

This year we are excited to programme two days specifically for digital leaders. Both digital leaders' days will be run in collaboration with partner cultural organisations. In September, we will be working with Southbank Centre and the Philharmonia Orchestra to programme a day of activities linked to their Universe of Sound exhibition. Pupils will experience the Philharmonia's Virtual Reality orchestra and explore the accompanying immersive exhibition showcasing a performance of Holst's masterpiece, *The Planets* by the Philharmonia. They will also participate in various other technology-focused activites. The second digital leaders' day, in Spring term 2017, will be a part of new Tate Modern's TateExchange programme. Pupils will be invited to take over Level 5 of the new Tate Switch building on the Southbank. The CLC will create a day of digital activities using the galleries as inspiration. The date for this event will be confirmed in due course.

Universe of Sound (PhilVR): Monday 26 September
Tate Exchange Spring Term (TateEX): (date tbc)

Both sessions are free to SLA schools and will be allocated on a first come, first served basis. Please state preference on booking form (either code PhilVR or TateEX).

Online Safety

Is your school's online safety provision fit for purpose?

The CLC has a specific focus on online safety in education and we have strong links with leading online safety bodies such as the UK Safer Internet Centre. The CLC team comprises certified E-Safety Mark assessors and CEOP Ambassadors. We can work with your whole school community from teachers and pupils to parents and technicians to support them in better understanding their responsibilities in keeping children and young people safe online. The CLC is also able to support schools wishing to apply for the Ofsted-recognised E-Safety Mark.

Whole school

- Audit your school's provision and apply for the E-Safety Mark using a consultancy session to help prepare (page 18)

SLT

- Attend the CLC's SLT briefing on Online Safety (page 38)

Staff

- Attend the CLC's ThinkUKnow and online safety CPD (page 33)
- Use an in-school CPD session to brief your colleagues (page 19)
- Book your TAs onto the online safety briefing (page 44)
- Use a consultancy session to have a member of the CLC team support you in resolving online issues (page 18)
- Use a consultancy session to find out more about social media (page 18)
- Sign up your online safety lead to the year-long professional development programme (page 26)

Pupils

- Use a consultancy session to have the CLC run online safety assemblies in school (page 18)
- Book an Online Safety Interactive KS2 workshop (page 4) and develop your pupils' online safety awareness of social media sites
- Book a Digital Leaders & Pupil Voice in-school workshop (page 11) and help the wider school community better understand your online safety policies

Parents

- Use a workshop to run a parents' and carers' online safety briefing (page 45)
- Use a consultancy to audit your parents' understanding of online safety issues (page 18)

Governors

- Use a consultancy and run a briefing session for governors (page 18)

Speak to Kim Morrison **kmorrison@londonclc.org.uk** if you would like further information on the CLC's online safety services.

Technical Support

Are you satisfied with your school's technical support provider?

If not, why not work with the CLC's award-winning team of technicians. From regular scheduled visits and emergency call-outs to one-off installations and strategic planning, the CLC's technicians will work with you to ensure that your school's systems are fit for purpose. In addition, the team can also take on one-off work such as managed Wifi installations, mobile device deployment, system deployment and MinecraftEDU Server installations as well as giving general advice and undertaking network audits and bespoke projects.

The CLC's provision of a joined-up technical and curriculum support service has become an integral part of everyday school life at Hillmead. The CLC's technicians have completely transformed the infrastructure across the school and we always have confidence that procurement advice is provided with not only independence and value for money in mind, but primarily how the equipment can aid our delivery of the curriculum. London CLC's impact at the school is backed up by our recent Outstanding Ofsted report, that states:
The quality of teaching is outstanding, technology is used well to enhance learning
Deputy headteacher,
Hillmead Primary School

For details of services and prices contact
Krzysztof Jurek
techsupport@londonclc.org.uk

The technical support we receive from London CLC is exceptional. The team is always on hand to solve problems quickly and offer expert insight and advice. The difference with other IT technical support teams we have used in the past, is LCLC's willingness to listen and their determination to reach a solution.
Acting headteacher,
Cathedral Primary School

Consultancy and Advice

Every SLA package includes a number of in-school or centre-based consultancy sessions offering one-to-one support in a specific area.

SLT

- Digital strategy and ICT Vision
- ICT Mark and the SRF

Online safety

- Online safety audit
- Governor online safety briefings
- Online safety for parents
- E-Safety Mark
- Creating an acceptable use policy/policies
- Online safety assemblies

Wider school community

- Family learning and working with parents
- Online safety for parents
- Bid writing

Cross-curricular use of technology

- Using technology to support cross-curricular learning
- Subject-specific consultancy, eg technology to support maths/science/English, etc

Computing

- Computing assessment and progression
- Curriculum planning

Blogging

- Blogging – Technical set-up (class accounts/templates/basic settings, etc)
- Blogging – The pedagogy (effective use of class blogs to improve children's learning)

Marketing and communication

- Promoting your school brand via social media and other tools

Technical

- IT procurement and advice
- IT infrastructure health check
- Google apps
- Wifi audit
- iPad set-up advice

School-based CPD

School-based CPD (after-school or half-day) can be delivered in the following areas:

Computing

- Embedding the computing curriculum
- Phase-specific CPD in computing
- Specific software/hardware support, eg *Scratch, Kodu, Lego NXT*
- Understanding Digital Literacy

Online safety

- Online safety update for teachers
- Teaching online safety
- ThinkUKnow certification for staff (full-day only)
- Online safety for TAs

Cross-curricular use of technology

- Using technology to support science
- Using technology to support English
- Using technology to support maths
- Using technology to support humanities
- Using technology in Early Years
- Supporting writing through blogging (Blogs must be set up in advance of CPD. Consultancy sessions can be used if help is required in setting up blogs.)
- Reading for pleasure

Hardware/software specific

- Get going with Minecraft (combine with Minecraft set up consultancy)
- Get going with animation
- Get going with film-making
- Get going with Green Screen
- Get going with Scratch or Kodu
- Moving on with Scratch or Kodu
- Getting the most from your iPads
- Getting more from your 2Simple software
- Creating great films with your iPads
- Making the most of your Macs

Assessment

- Digital portfolios for assessment and evidence
- Assessing the computing curriculum

Other

- Working with parents
- Online safety for parents

Social media

- The do's and don'ts of Twitter for teachers

Technology Loans

The CLC has a range of equipment and hardware that schools can borrow for the period of half a term. If you would like the loan for a longer period, please book the same loan for consecutive terms. The CLC will provide help-sheets including curriculum ideas, video tutorials and maintenance support for the duration of the loan. Loans can be combined with CLC or school-based training to help ensure that equipment is used most effectively.

Please note that the CLC expects kit to be put onto the school's own insurance policy for the duration of the loan. All losses, damages and breakages will be re-charged to the school.

Control Technology

EYFS – Get Programming

Curriculum links L1 2 sets

This set features five programmable robots, including Bee-Bots, a Constructa-Bot, a Bee-Bot floor map and a tablet device loaded with EYFS programming apps. It provides the perfect framework for developing young children's problem solving and critical thinking using technology.

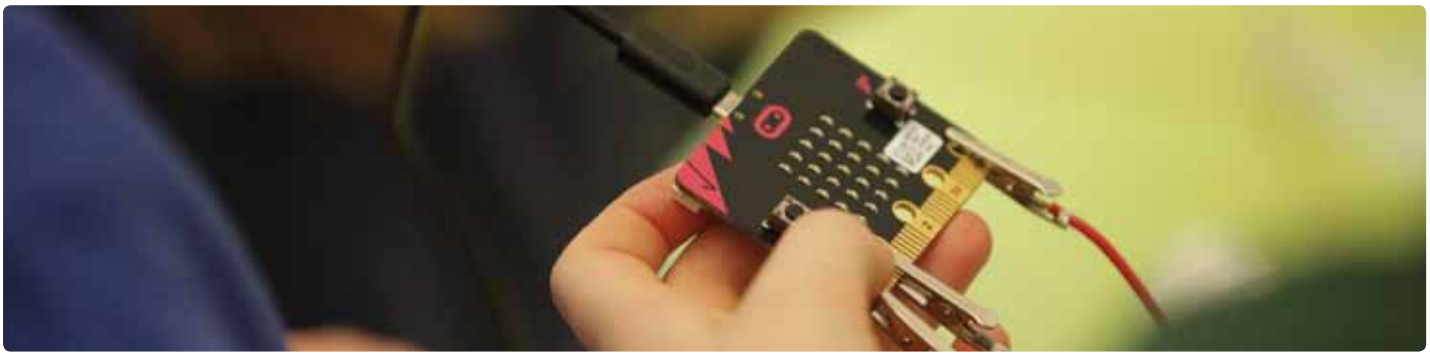
The World: Knows how to operate simple equipment. Shows skill in making toys work by pressing parts. Completes a simple program on a computer
Creating and Thinking Critically: Develop their own ideas, make links between ideas, and develop strategies for doing things
Technology: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. Children find out about and use a range of everyday technology

ProBot Robots

Curriculum links L2 3 sets of 6

Probots are programmable robots with numbered buttons and can be fitted with a pen for geometric drawing activities. Additionally, they feature a digital display screen, a useful visual aid for building up more complex instructions.

Computing: Create and debug simple programs. Use sequence, selection, and repetition in programs
Maths: Compare and classify geometric shapes



BBC Micro:Bit

Curriculum links | **L3 2 sets of 15**

The new BBC Micro:Bit, part of BBC's Make it Digital initiative, allows young people to hack the world around them. It's a small, mobile piece of programmable technology whose features include a simple LED display, two input buttons and internal motion-sensing technology. It can also be wired to external electronic components to form a circuit, and programmed to work with various forms of input and output, enabling students to bring everyday objects to life.

Computing: Design, write and debug programs that accomplish specific goals. Work with various forms of input and output
Design & Technology: Design innovative, functional, appealing products

Pippin Robots

Curriculum links | **L4 2 sets of 6**

Pippins are suitable for KS1 and lower KS2. The inclusion of numbers in their controls means that, when fitted with a pen, they can be programmed to draw shapes and patterns.

Computing: Create and debug simple programs. Work with various forms of input and output
Maths: Compare and classify geometric shapes

Blue-Bots, iPads & Tac Tiles

Curriculum links | **L5 1 set of 6**

Blue-Bots are TTS's latest offering in programmable floor robots for EYFS and KS1. They are similar to Bee-bots but, thanks to their Bluetooth capacity, they can be controlled remotely through the accompanying app, or through the Tac Tiles included in this set. The tiles can be used to create a physical sequence which, when activated, programs the Blue-Bot to follow instructions.

Computing: Understand algorithms. Create and debug simple programs. Use logical reasoning

Lego NXT

Curriculum links | **L6 2 sets of 6**

These KS2 robot kits feature several sensors and motors, all of which are programmable through Lego's Mindstorms software. They provide opportunities to create more complex programs. Sets include six pre-assembled robots and laptops. In terms 3 and 4, the kits are only available to schools participating in the IBM Robo-Challenge.

Computing: Use sequence, selection and repetition in programs. Work with variables and various forms of input and output. Detect and correct errors in algorithms and programs

Lego WeDo Lower KS2

Curriculum links | **L7 1 set of 6**

WeDo is a simple, programmable Lego kit. Pupils can design and build a simple robotic device and program it through Scratch or with Lego's own software. The set includes six kits and accompanying laptops.

Computing: Design, write and debug programs that accomplish specific goals. Work with various forms of input and output
Design & Technology: Design innovative, functional, appealing products

Robot Arm and Robot Car

Curriculum links | **L8 1 set**

Robot Arm and Robot Car are advanced robotics kits. They can be controlled with the text-based programming language Python, which comes installed on the Raspberry Pi computer included in this set. These sets are an exciting way to challenge and inspire higher-ability upper KS2 pupils.

Computing: Design, write and debug programs that accomplish specific goals. Work with various forms of input and output
Design & Technology: Understand and use mechanical systems, apply an understanding of computing to program, monitor and control products

Control Technology

Raspberry Pi & the Pi-topCEED

Curriculum links | **L9 1 set of 6**

Raspberry Pis are small, cheap DIY computers, which come with programming software preinstalled. Pupils can build a Raspberry Pi computer, and then program games or even use Python coding to manipulate a world within Minecraft Pi Edition. Each Raspberry Pi comes with a 14 inch Pi-topCEED to enable you to get to work straight away.

Computing: Design, write and debug programs that accomplish specific goals. Work with variables and various forms of input and output. Select, use and combine software on a range of digital devices

Makey Makeys

Curriculum links | **L10 1 set of 6**

Makey Makeys can transform any conductive object (including bananas or pupils) into a computer keyboard button, creating the potential for a plethora of creative electronics or computing projects.

Computing: Work with various forms of input and output
Design & Technology: Design innovative, functional, appealing products
Science: Compare everyday materials on the basis of conductivity

Programming Minibooks

Curriculum links | **L11 1 set of 15**

This set of 15 lightweight Minibooks include software such as Scratch, which can be used by pupils to create games or animations.

Computing: Use sequence, selection and repetition in programs. Design, write and debug programs that accomplish specific goals. Select, use and combine a variety of software to create programs

Data Logging

TTS Log-Box Data Logger

Curriculum links | **L12 2 sets of 6**

This simple-to-use data logger includes light, sound and temperature sensors. Readings can be downloaded via a USB cable for more detailed analysis of field experiments.

Science: Take accurate measurements using thermometers and data loggers. Gather, record, classify and present data
Geography: Take accurate measurements using thermometers and data loggers. Gather, record, classify and present data

LogIT Explorer Set

Curriculum links | **L13 3 sets**

Much like the Log-Box, these ergonomic data loggers can gather light, sound and temperature data to support the science and geography curricula.

Science: Take accurate measurements using thermometers and data loggers. Gather, record, classify and present data
Geography: Use fieldwork to observe, measure, record and present

Media

Our range of media equipment loans is extremely versatile and can be used to support virtually any curriculum area.

USB Microscope — L14 1 set of 6

USB microscopes can support primary science and EYFS outdoor learning. They are ideal for exploring plants, minibeasts and everyday objects up close, providing a fascinating new perspective on the world around.

Digital Cameras — L15 3 sets of 10

These easy-to-use cameras enable students to create digital images, either with a design or a research focus. The Canon Ixus can also record video.

Animation Sets — L16 10 sets

Animation is an effective and engaging way to support learning across the curriculum. Animation sets now include HD webcams, making them even easier to use. This loan can be combined with 'Animation Across the Curriculum' CPD on page 32.

Green-screen Set — L17 2 sets

The potential for green-screen film-making to support the curriculum is boundless, as it allows any background image to be imported into a piece of video. It can take your class anywhere – past or present, real or fictional. The set includes a green-screen backcloth and iPad with Green Screen app by DoInk.

Samson USB Microphones — L18 2 sets of 10

This set of computer microphones is ideal for making high-quality audio recordings. They connect via USB and can be used to make podcasts, audio books or school radio shows in conjunction with a range of software, such as Audacity.

Other

EYFS Outdoor Explore — L19 2 sets

This set offers a range of exciting ways to use technology to enhance outdoor learning in EYFS. It contains two microscopes, cameras and sounds recorders, a visualiser and three Talking Buttons, all of which create exciting opportunities for young children to interact with the outside world – from examining minibeasts to recording voices.

3Doodler Pens — L20 1 set of 6

If your school is excited by the prospect of 3D printing but uncertain about buying a printer, this loan could be the perfect solution. The 3Doodler is a pen which extrudes heated plastic at a steady pace, so that as it cools it solidifies into a 3D shape of your design. Like glue guns, these pens reach high temperatures, so should be used with care under adult supervision.

iPads — L21 2 sets of 6

iPads have fantastic potential for learning but they can also represent a huge financial commitment for schools. This loan is a great opportunity to explore the possibilities they offer in the classroom before investing in this fast-developing and versatile technology. CLC iPads come with a range of education apps for use across the curriculum.

Voting Pads

L22 1 set of 60

Voting pads can be used to survey parents or pupils in large groups, and are great for big events and parent consultations. They allow you to transform PowerPoint presentations into interactive quizzes or surveys. The software can display feedback in real time, presenting a great stimulus for class discussion. Results can be stored and retrieved for analysis. The loan includes 60 handsets. A laptop is available on request, although any computer with PowerPoint installed can be upgraded to run a survey.

Nook Simple Touch eReader

L23 1 set of 6

Many schools are exploring the potential of eReaders to engage pupils and to share books across a school. This set of six Nook Simple Touch devices will give schools the opportunity to trial an eReader, to support targeted pupils and to provide a resource for guided reading sessions. The CLC Nooks will come preloaded with a range of popular children's books including *Diary of a Wimpy Kid, Holes, Lemony Snicket, Harry Potter, Artemis Fowl, War Horse* and many more.

Professional Learning at the CLC

Extended Professional Development Programme

New for 2016-2017 is the CLC's extended professional development programme giving teachers an opportunity to develop a deeper level of understanding around a specific theme or subject. The programmes combine professional development days with ongoing support and opportunities to share and collaborate across schools.

Online Safety

EPL1

This programme supports schools in developing a robust and appropriate online safety strategy for their school. Using the Ofsted-recognised, 360safe auditing tool the sessions will work through the key areas of provision creating a tailored action plan for your school. Over the course of the programme, schools will get input in policies and procedures, curriculum development, leadership responsibilities, staff development, infrastructure and monitoring. Support will be available between sessions. All attendees will gain CEOP ThinkUKnow certification.

Thursday 3 November

Full-day session to include CEOP ThinkUKnow certification and introduction to tools and resources to support the development of your provision (see page 33 for details of this session).

Friday 10 March

Follow-up half-day session to check progress and help schools move on in their provision.

Friday 9 June

Final half-day session to review actions and create a plan for ongoing development. For those schools ready to apply for E-Safety Mark, this session can also be used for pre-submission advice.

This CPD can be combined with any of our other online safety programmes, eg staff and governor training, pupils' workshops, parent sessions or bespoke consultancy (see page 14 for details).
Having attended this programme, teachers will:

- Have a comprehensive understanding of the key aspects of online safety
- Have a clear idea of policy requirements and best practice
- Be better able to respond to online safety incidents
- Be better able to coordinate provision of e-safety at school

Computing Assessment

EPL2

This ongoing CPD programme will support computing subject leaders to develop and implement assessment, standardisation and moderation for the computing curriculum. Recording and evidencing pupils' learning and progression in computing requires a good understanding of developmental steps and expectations. Over the course of this CPD programme, teachers will have the opportunity to learn about a range of assessment approaches, try these out in school and review progress with the group. Support will be available between sessions. Teachers will be required to bring examples of children's work to the sessions.

Thursday 10 November

A morning session giving teachers an opportunity to learn about a range of assessment approaches and establish a clear idea of pupil progression in computing.

Tuesday 21 March

Follow-up morning session to set standards and moderate pupils' work in computing, check teachers' progress and set up a school system to assess computing.

Thursday 6 July

Final morning session to review computing assessment and progression systems and to create a plan for ongoing development.

Having attended this programme, teachers will:

- Have a clear idea of pupil progression in computing
- Be able to moderate pupils' work in computing
- Be able to set up a school system to assess computing
- Know about digital tools that can be used to evidence pupils' learning

New to Subject Leadership in Computing

EPL3

This programme has been designed for primary teachers who have recently taken on responsibilities and leadership for technology and computing. The subject leader's role is extensive and ever-changing, and can seem daunting to even the most experienced practitioner. Three half-day sessions of support will be spread over the year. Colleagues will be expected to attend all three sessions. The third session will be held in a school and will include classroom visits.

Wednesday 21 September 9am –12.00 pm

To include overview of the responsibilities of the computing subject leader.

Wednesday 18 January 9am –12.00 pm

Follow-up session exploring assessment plus a practical computer science session.

Summer term Date & time tbc

Facilitated school visit.

Having attended this programme, teachers will:

- Have a clear understanding of the role of the computing/technology subject leader
- Be able to create a school action plan to support their subject area
- Be confident to support colleagues' professional development in computing and the use of digital technologies across the curriculum
- Learn from the experience of other schools and subject leaders

Minecraft Across the Curriculum

EPL4

Our extended Minecraft CPD programme is designed to help teachers become experienced, knowledgeable and confident users of this hugely popular computer game to support learning in a range of curriculum areas. It will be particularly useful for teachers who plan to set up a Minecraft Club in their school, as the series of follow-up sessions are intended to serve as the CLC's very own Minecraft club. They will provide an environment in which teachers can share the successes or challenges they've experienced using the software, and pick up some tips on how best to proceed with the software back at school. Virtual support will be provided between sessions.

Thursday 6 October

Full-day introductory session showcasing some of the most effective uses of Minecraft and allowing teachers to hone their skills (see page 32 for details of this session).

Thursday 9 February

Half-day follow-up session during which teachers can share progress and ideas, and receive advice on how to further develop their use of the tool.

Thursday 15 June

Final half-day session during which teachers can showcase what their pupils have achieved in Minecraft and discuss their future plans for its use in their schools.

Having attended this programme, teachers will:

- Understand the potential of Minecraft as a tool for cross-curricular learning
- Be equipped with a range of activities suitable for use in school Minecraft clubs or within the classroom
- Be aware of the potential for Minecraft to facilitate curricular progression from Years 3 to 6

Full-day Professional Development

Please note, schools can book onto as many CPD sessions as they wish as a part of their SLA package. Places are limited to two members of staff per school per session. Full-day courses and conferences run from 9.15am to 3.30pm.

Autumn Term

Teach Computing KS1

Thursday 22 September PL1

This session will help KS1 class teachers who are not computing specialists to understand the requirements of the computing curriculum so that they can teach it in an engaging and accessible way. It will help teachers unpick the programme of study, focusing on the major concepts and progression into KS2. The session will help teachers become more familiar with the key technologies and online resources that can be used to teach computing. Teachers will be signposted to activities and lesson plans that can be used in class.

Having attended this course, teachers will:

- Fully understand the requirements of the computing curriculum at KS1
- Understand progression between KS1 and KS2
- Feel confident in their understanding of and ability to teach computing at KS1
- Feel confident in using a variety of appropriate software and hardware

Teach Computing KS2

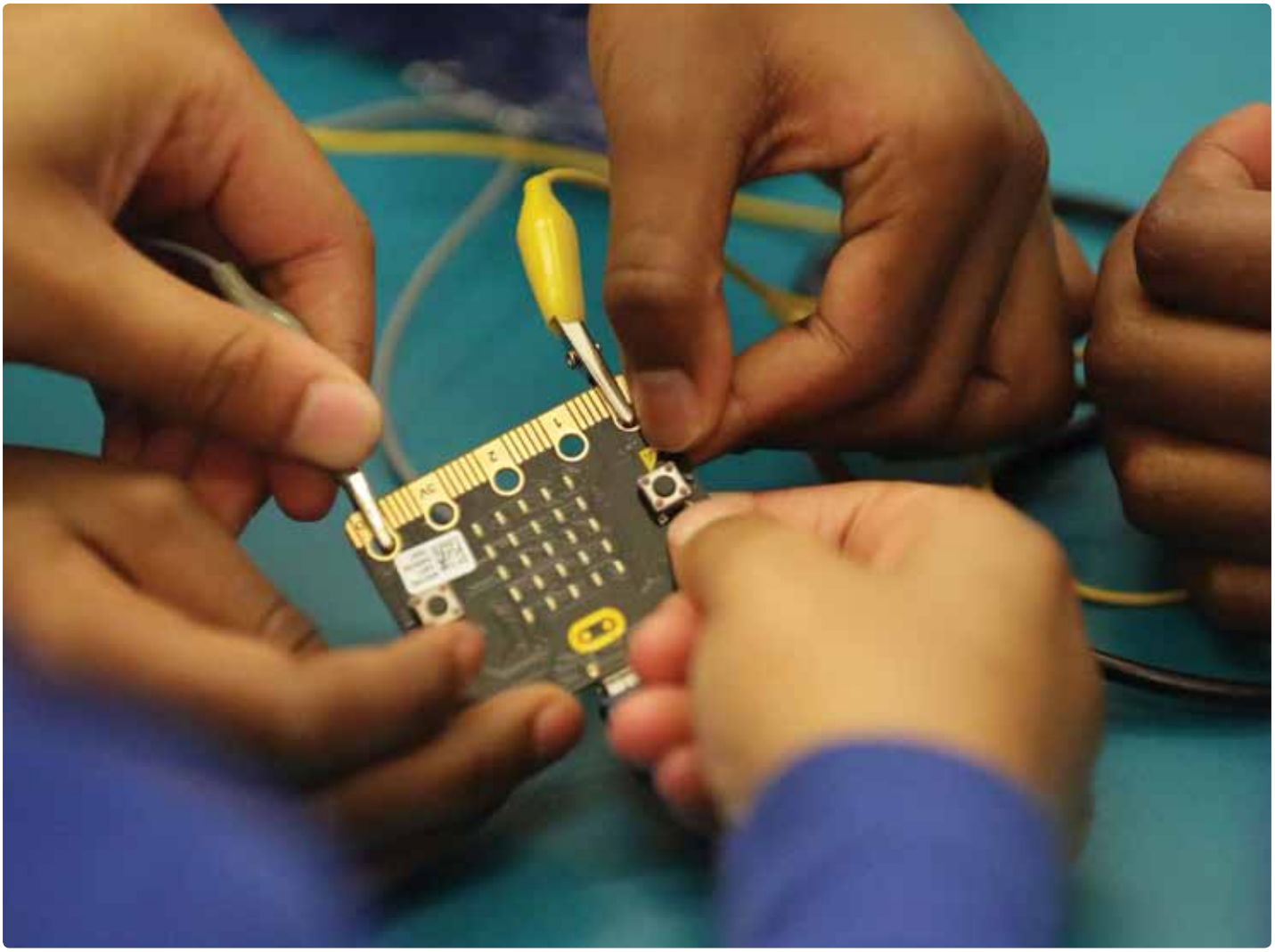
Thursday 29 September PL2

This session will help KS2 class teachers understand the requirements of the computing curriculum, and learn how to teach it an engaging and accessible way. Teachers will better understand the idea of computational thinking, which underpins so much of the computing curriculum. The session will build confidence in a variety of tools that can be used in class, and will look at ways to assess and monitor progress.

The session will help teachers appreciate how computing can develop pupils' problem-solving skills and how this can be done in a creative and investigatory way. The majority of the day will be spent focusing on practical activities, helping teachers feel confident and enthusiastic about computing and technology.

Having attended this course, teachers will:

- Fully understand the requirements of the computing curriculum at KS2
- Understand progression between KS1 and KS2
- Feel confident to teach computing at KS2
- Feel confident in using a variety of appropriate software and hardware



Minecraft Across the Curriculum

Thursday 6 October PL3

Minecraft is a world-building PC game which is hugely popular with children and adults alike and which has, in recent years, been used in a growing number of classrooms to support learning across a surprising range of subjects. Here at London CLC we use a modified version of the software called MinecraftEDU in our workshops to help us create unique environments within which to explore the curriculum, while maintaining a useful degree of control over the players present. Within this digital classroom pupils can interact, create and collaborate, all under the watchful eye of their teacher.

During this session we will look at some of the ways in which Minecraft has been used, at London CLC and beyond, to teach and enrich aspects of the UK primary curriculum. Teachers will have the opportunity to practise using Minecraft, so that they feel equipped to take this incredibly versatile tool into their own classrooms. For teachers wishing to further develop their use of Minecraft, there is an option to attend follow-up sessions in the Spring and Summer (see page 29 for further details).

Having attended this course, teachers will:

- Be familiar with both student and teacher controls in MinecraftEDU
- Understand the potential of Minecraft as a tool for cross-curricular learning
- Be equipped with a range of activities suitable for use in school Minecraft clubs or within the classroom

Animation Across the Curriculum

Wednesday 12 October PL4

Animation is an effective and engaging way to support learning across the curriculum. It encourages collaboration and helps pupils present ideas for an audience. From re-telling stories and literature and animating scientific ideas to re-enacting historical events, animation can help pupils reinforce understanding and present concepts. This session will incorporate IntoFilm resources and materials.

Working with CLC specialists, participants will learn animation techniques and editing. The day will include guidance on structuring and managing animation work within the curriculum.

Having attended this course, teachers will:

- Be confident in using computer software and apps to create impressive 2D and 3D animated films
- Know how to edit a simple animation
- Have a range of ideas and activities for using animation in the classroom

Certified Online Safety Training

Thursday 3 November PL5

This day-long training session will cover all the essential aspects of online safety. We will examine the risks pupils, parents and school staff face online. We will outline ways in which schools can encourage pupils to become responsible and respectful digital citizens and address concerns around the core issues of content, contact and conduct. We will also review Ofsted policy and curriculum requirements and examine the links to the Prevent Agenda. Participants will gain the ThinkUKnow accreditation for online safety, but the course will also draw on other programmes and materials. Colleagues will be introduced to the free 360Safe auditing tool which can be used to create whole-school action plans. Online Safety is not simply a technological issue, so we invite SLTs, safeguarding leads and subject leaders to attend. For schools wanting further support in this area, there is an option to attend follow-up sessions in the Spring and Summer (see page 26 for further details).

This session is scheduled in the lead-up to Safer Internet Day 2017, to give attendees time to prepare for this event. The morning session will focus on CEOP's ThinkUKnow accredited training materials, which provide an excellent overview of the major online safety topics. In the afternoon we will delve deeper into specific aspects of online safety.

Having attended this course, teachers will:

- Have an excellent grounding in the key aspects of online safety
- Know about initiatives and resources for pupils, parents and school staff
- Have a clear idea of policy requirements and best practice
- Be better able to respond to online safety incidents
- Have gained ThinkUKnow accreditation

English Conference

Tuesday 22 November PL6

Writing and reading across the curriculum

Building on the popularity of previous CLC professional development sessions to support writing and reading for pleasure, this academic year we are running a whole-day conference for English subject leaders and teachers interested in literacy. Workshops will include ways to support reading, writing, speaking and listening through blogging, dramatising books and poetry, and animating stories, using online book reviews, digital books and games.

Having attended this conference, teachers will:

- Understand the educational opportunities offered by digital writing and publishing
- Have a range of ideas and activities of how to engage children to be readers and writers
- Feel confident in using a variety of appropriate software and apps

Computing Conference 1

Tuesday 6 December PL7

These popular conferences are aimed at Computing/Technology subject leaders, heads of department and teachers interested in the use of technologies across the curriculum. The conferences will include keynote speakers and policy and curriculum updates relating to the computing curriculum and the use of technologies in school, as well as practical sessions and opportunities to learn from other schools.

Having attended this conference, teachers will:

- Be able to support and lead school colleagues in teaching the computing curriculum and in using digital technologies across the curriculum
- Know more about policy and practice in online safety, digital skills and the computing curriculum
- Be up to date with innovation in technology and pedagogy

Spring Term

Film-making across the Curriculum

Wednesday 11 January PL8

Learn how to create films for school websites and broadcasts. Improve your camera techniques, support pupils' film-making across the curriculum and master simple film and editing skills in this full-day course working alongside CLC film tutors. This session will incorporate IntoFilm resources and materials.

Having attended this course, teachers will:

- Know how to plan and structure a film
- Know how to use different kinds of shots and edit simple films
- Have a range of ideas and activities for film-making in the classroom

Evidence & Assessment Across the Curriculum

Thursday 12 January PL9

Digital technologies have changed the way pupils are able to reflect on and present their learning and how teachers can track, record and evidence pupils' progress. During this full-day session, teachers will learn about different approaches to assess and evidence learning across the curriculum.

Having attended this course, teachers will:

- Understand the role of blogs and digital portfolios to support metacognition and children's reflection and to provide a record of children's learning
- Be confident in how to use video, audio, digital image and presentation tools to capture pupils' learning and reflections
- Be able to evaluate digital platforms (eg blogs, cloud-based storage) to evidence pupils' learning

Humanities Conference

Tuesday 28 February PL10

The humanities conference provides an opportunity for teachers with responsibilities for geography, history and RE to learn about curriculum developments, share their expertise and investigate a range of ways that digital technologies can support humanities teaching and learning. The conference will also introduce experts from partner museums and galleries who will share exciting opportunities to work with their organisations.

The day is all about creating relevant and engaging activities for pupils. We will look at how technology can help pupils explore and understand the distant past, remote environments and different belief systems. Teachers will be able to take their pick from a range of workshops that will cover all the humanities subjects from KS1 to upper KS2.

Having attended this conference, teachers will:

- Have a range of new digital skills to support learners
- Know about exciting opportunities provided by local and national cultural organisations
- Learn from the experiences of other schools and subject leaders

Summer Term

Computing Conference 2

Tuesday 20 June PL11

These popular conferences are aimed at Computing/Technology subject leaders, heads of department and teachers interested in the use of technologies across the curriculum. The conferences will include keynote speakers, policy and curriculum updates relating to the computing curriculum and the use of technologies in school, as well as practical sessions and opportunities to learn from other schools.

Having attended this conference, teachers will:

- Be able to support and lead school colleagues in teaching the computing curriculum and in using digital technologies across the curriculum
- Know more about policy and practice in online safety, digital skills and the computing curriculum
- Be up to date with innovation in technology and pedagogy

Half-day courses and conferences

Please note, schools can book onto as many CPD sessions as they wish as a part of their SLA package. Places are limited to two members of staff per school per session. Half-day courses and conferences run from 9.00am to 12.00pm unless stated.

Autumn Term

New to Leadership in Computing
Extended CPD 1

Wednesday 21 September PLH01

This is a three-session programme. See page 28 for full details.

Languages (MFL) Forum

Wednesday 5 October PLH02

This session, facilitated by a lead advisory teacher, is for languages (MFL) subject leaders or anyone involved in coordinating or teaching languages. The forum will give teachers the opportunity to learn about policy and curriculum updates, discuss the latest developments in primary languages, and share their expertise and their experiences. Discussion will be followed by a CLC-led practical session that will demonstrate how digital technologies such as film, audio, blogs and other tools can be used to aid language learning.

Having attended this course, teachers will:

- Be up to date with the latest developments in primary language teaching
- Have practical ideas for integrating digital technologies into primary languages lessons

SLT Online Safety Briefing

Thursday 13 October (10 - 11am) PLH03

With online safety now an increasing priority for Ofsted inspectors, schools must ensure that policies, practice and procedures are fit for purpose. This short briefing session will give an overview of this complex and ever-changing area whilst also providing guidance for SLT to help ensure their schools are Ofsted-ready.

Having attended this briefing, SLT will:

- Have a clear understanding of online safety policy and Ofsted requirements
- Be fully aware of leadership responsibilities
- Understand how to address gaps in provision and where to seek help

Computing Assessment
Extended CPD 1

Thursday 10 November EPL2

The 1st of three half-day sessions. See page 27 for full details.

Spring Term

New to Leadership in Computing
Extended CPD 2

Wednesday 18 January EPL3

The 2nd of three half-day sessions. See page 28 for more details.

Online Safety Briefing for NQTs

Friday 27 January (9 -11am) PLH04

Understanding the complex issues around online safety is of paramount importance to schools. This briefing session for NQTs will focus on raising awareness of the issues whilst also providing support and guidance on effective teaching of digital literacy and online safety. In addition the session will support new teachers in understanding how to keep themselves safe and protect their professional reputation.

Having attended this course, NQTs will:

- Have a deeper understanding of the key aspects of online safety
- Know about initiatives and resources for pupils and school staff
- Be better able to respond to online safety incidents

Introduction to Scratch

Thursday 2 February PLH05

Scratch is the CLC's go-to tool for KS2 Computing. It is flexible, encourages creativity and provides a rigorous logical structure to help pupils learn about programming and problem solving. In this session teachers will be able to hone their Scratch skills and feel confident using this software with pupils. The session will begin with the basics to help teachers get to grips with the key concepts that underpin Scratch and computer science. Teachers will also be given a chance to review some of the CLC's favourite lesson plans and Scratch teaching resources, including resources from the ScratchMaths EEF funded research project. This session can be combined with the afternoon training on Kodu (see below).

Having attended this course, teachers will:

- Know how to use and teach Scratch
- Understand the relevance of Scratch in the computing curriculum
- Be aware of a range of resources that support teaching and learning with Scratch

Introduction to Kodu

Thursday 2 February 1.15 – 4.15pm PLH06

Kodu can help KS2 pupils understand computational thinking and programming through the context of games design. In this CPD session teachers will explore logic and problem-solving using Kodu's easy, drag-and-drop, 3D programming language. The course will demonstrate how this software can be used to teach computing in a practical and engaging way. Kodu is also a great way to extend learners who are already well versed in Scratch. The 3D graphics offer a new dimension in terms of creativity and challenge. This session can be combined with the morning session on Scratch (see above).

Having attended this course, teachers will:

- Know how to use and teach Kodu
- Understand the relevance of Kodu in the computing curriculum
- Be aware of a range of resources that support teaching and learning with Kodu

Minecraft across the Curriculum
Extended CPD 2

Thursday 9 February EPL4

The 2nd of three sessions. See page 29 for more details.

Maths Forum – ScratchMaths

Friday 24 February PLH07

The maths forum provides an opportunity for maths subject leaders to share their expertise and investigate ways in which digital technologies can support maths teaching and learning. This year we will introduce schools to the ScratchMaths project, a piece of research conducted by UCL Knowledge Lab, with input from London CLC. ScratchMaths intends to show the impact of learning computer programming on the mathematics performance of pupils at Key Stage 2. The ScratchMaths team has developed a scheme of work and a series of lesson plans for upper KS2. In this session we will introduce to the ScratchMaths programme and explain how it can be used in your school. You can find our more at **scratchmaths.org.**

ScratchMaths is a national project funded by the Educational Endowment Foundation (EEF). As part of the project, over 100 schools across the country are trialling a new Y5/6 computing curriculum, based around the free online programming environment Scratch, developed by the MIT Media Lab. In this session we will feed back on the research project as it nears completion, explain some of the key ideas behind the project, and run through some exemplar lessons to give attendees a flavour of the pupil activities. Attendees will be equipped to introduce these materials to colleagues back at school.

Having attended this course, teachers will:

- Better understand the links between mathematics and computer programming
- Learn more about the pedagogy behind the ScratchMaths research project
- Be able to introduce ScratchMaths to colleagues back at school

Online Safety
Extended CPD 2

Friday 10 March EPL1

The 2nd of three sessions. See page 26 for more details.

Computing Assessment
Extended CPD 2

Tuesday 21 March EPL2

The 2nd of three sessions. See page 27 for more details.

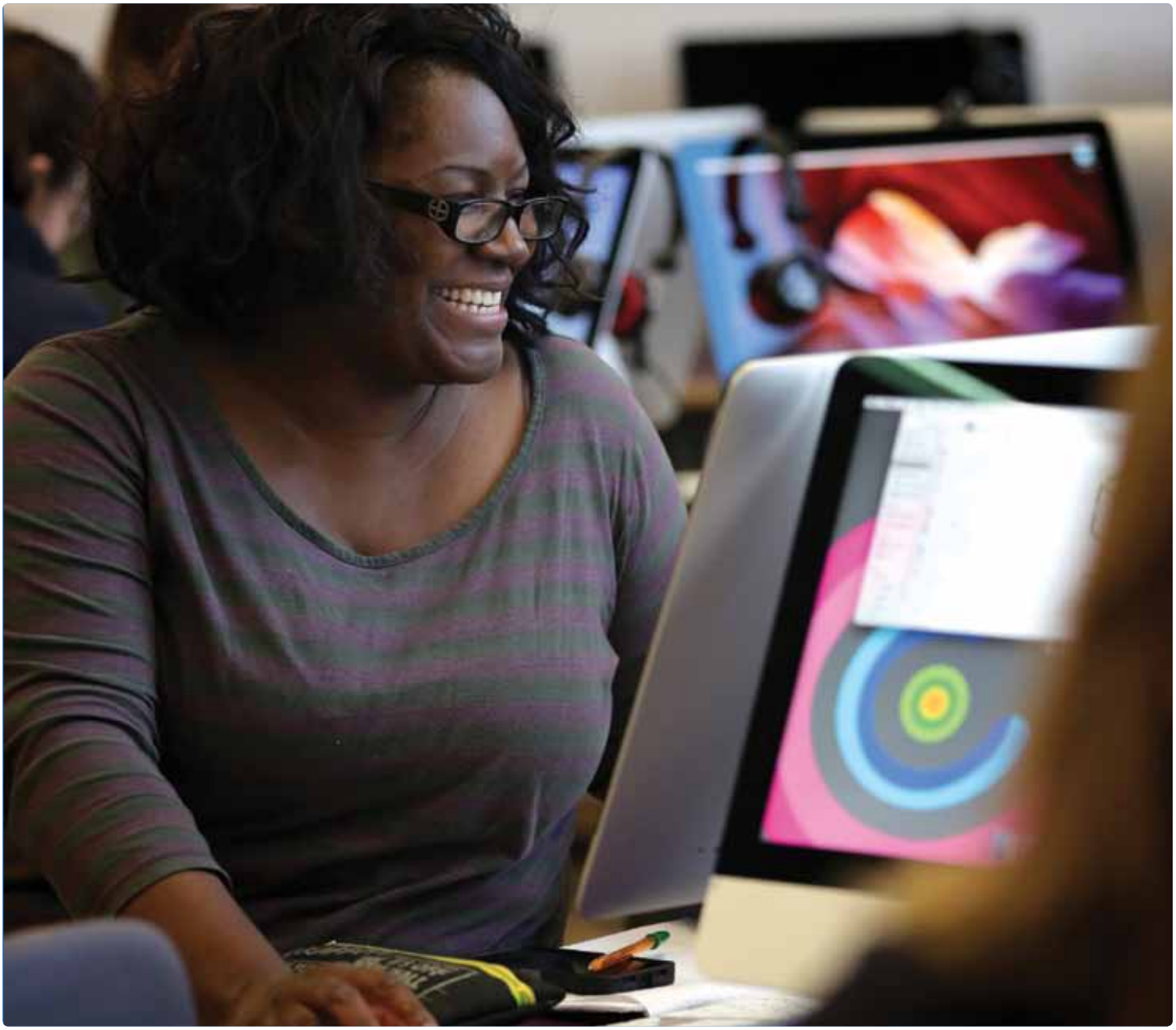
Science Forum

Tuesday 28 March PLH08

The CLC's Science Forum is an opportunity for primary science subject leaders to share their expertise and to work with a CLC tutor to investigate a range of digital technologies that can support science teaching and learning. The open forum format allows teachers to discuss a range of issues, such as systems for assessment, and to share their ideas and solutions. Discussion will be followed by a CLC-led practical session which will demonstrate how digital technologies can be used to aid scientific investigation and help pupils present their learning.

Having attended this course, teachers will:

- Be familiar with the science practice of other schools and subject leaders
- Be able to use digital technologies to facilitate cutting-edge scientific investigations
- Know about a range of engaging tools pupils can use to present their understanding of key scientific concepts



Summer Term

New to Leadership in Computing Extended CPD 3

Date tbc EPL3

The 3rd of three half-day sessions. See page 28 for more details.

EYFS Forum

Tuesday 23 May PLH10

This half-day forum provides an opportunity for practitioners from EYFS settings, nursery and reception classes to come together to share ideas and approaches, learn about policy and practice updates and take part in hands-on technology-based activities.

Having attended this course, teachers will:

- Be more confident in planning computing and technology-based learning activities for young children
- Be familiar with the practice of other EYFS practitioners and settings

Online Safety Extended CPD 3

Friday 9 June EPL1

The 3rd of three sessions. See page 26 for more details.

Minecraft Extended CPD 3

Thursday 15 June EPL4

The 3rd of three sessions. See page 29 for more details.

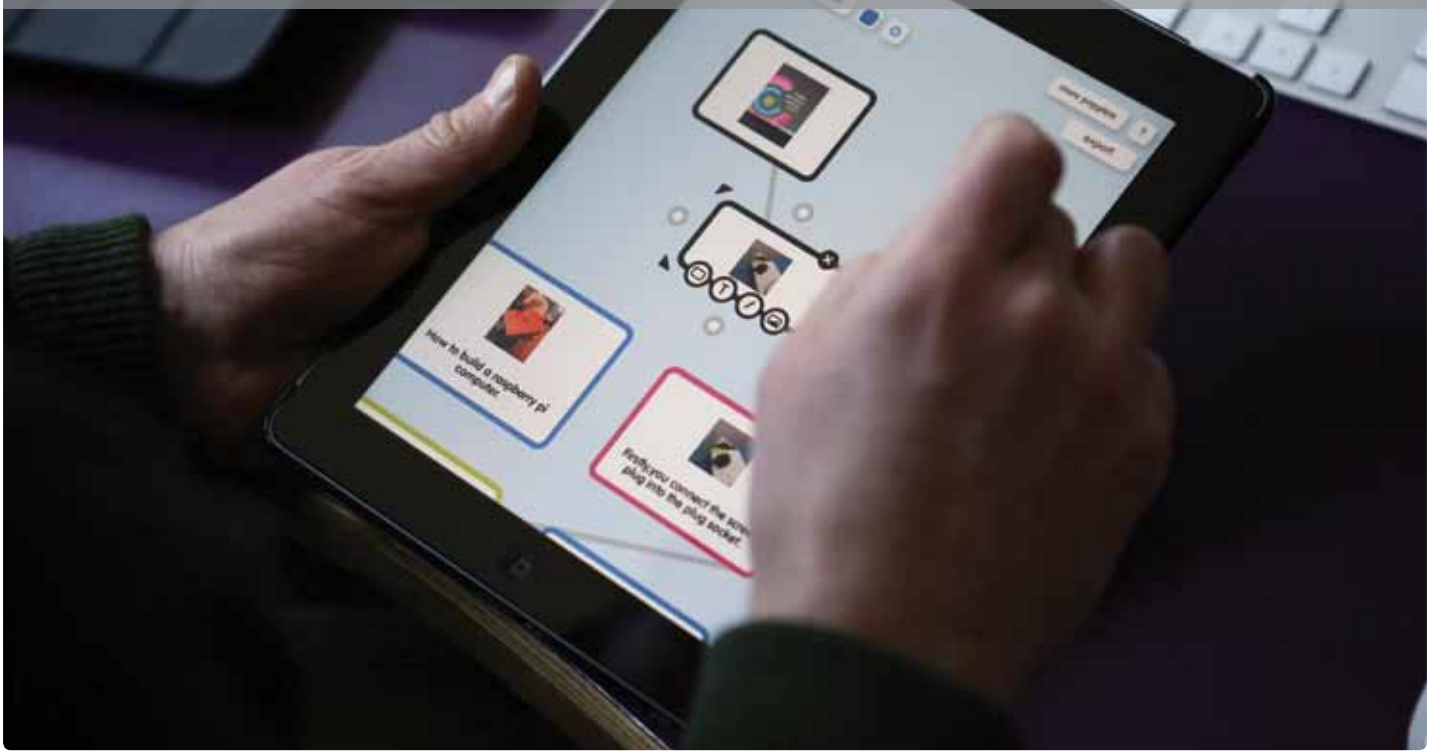
Computing Assessment Extended CPD 3

Thursday 6 July EPL2

The 3rd of three sessions. See page 27 for more details.

Teaching Assistant Training

Half-day Sessions (9am – 11.45)



Introduction to Online Safety

Tuesday 18 October TA01

This session is designed to help TAs develop their awareness of online safety issues and better understand the role they play in keeping children safe in a digital world.

Having attended this course, colleagues will:

- Have a better understanding of the key aspects of online safety
- Know about initiatives and resources to support pupils, parents and school staff
- Understand their role in supporting children's online safety

Film-making and iPads

Tuesday 10 January TA02

This session will help TAs to gain confidence in using the functions, features and apps on an iPad to shoot, edit and upload films. This session will incorporate IntoFilm resources and materials.

Having attended this course, colleagues will:

- Have a good understanding of how to create quality films using iPads
- Feel confident to support pupils in creating films using iPads
- Understand how to save, upload and export films made on an iPad

Family Learning

Free Family Learning programmes for SLA schools

The CLC offers a varied programme of family learning consultancy and activities to support and develop relationships between home and school. Funding for this strand of work is sought through the local authority and other external bodies, and priority is given to schools with an SLA. Our free family learning courses for schools focus on developing literacy, communication and numeracy skills through the creative use of digital technologies. Popular courses include animation, photography, blogging and resource making but we can create bespoke courses to suit your families' needs.

If your school would like to host a FREE family learning digital course, contact Suki Coe
scoe@londonclc.org.uk

Online Safety for Parents & Carers

The CLC's 2-hour 'Introduction to Online Safety' workshops are tailored for families and carers and help raise awareness of the issues while also providing practical tips and advice to help parents keep their children safe online.

Workshops cost £300
For more details, email Suki Coe
scoe@londonclc.org.uk

Workshop Table

EYFS – KS1 Half-Days

Workshop	Yrs	Subject	Page	Code
Games Design with 2Simple's 2DIY	1-2	Computing, Art & Design	6	WH01
Coding & Animation with Scratch Jr	1-2	Computing, English	6	WH02
Robots & Computing	1-2	Computing	6	WH03
Exploring the World with Digital Maps	1-2	Geography	8	WH08
Science: Plants & Natural Things	1-2	Computing, Science	9	WH09

KS2 Half-Days

Workshop	Yrs	Subject	Page	Code
Understanding Networks & the Internet	3-6	Computing	6	WH04
Robot Challenge	3-6	Computing	6	WH05
Problem Solving with Scratch	3-6	Computing, Maths	6	WH06
Performing & Recording Poetry	3-6	Computing, English	8	WH07
Patterns, Shape & Form in Rocks & Soils	3-4	Computing, Science	9	WH10

KS2 Full-Days

Workshop	Yrs	Subject	Page	Code
Robot Challenge	5-6	Computing	4	W01
Problem Solving with Scratch	3-6	Computing, Maths	5	W06
Raspberry Pi & Minecraft	4-6	Computing, Science, DT	5	W07
Lego WeDo Robots	3-4	Computing, DT	4	W02
Digital Citizens: Understanding the Internet	3-6	Computing, English	4	W03
Online Safety Interactive	3-6	Computing, English	4	W04
* Challenge & Enrichment in Computing	5-6	Computing, English	5	W05
City Planning in Minecraft	4-6	Computing, Geography, DT	7	W08
Robot Orchestra Maker Day	3-6	DT, Science	7	W09
Geography & Habitats	3-6	Geography, Science, Maths	7	W10
Digital Music with Sonic Pi	5-6	Computing, Music	8	WH11

*specific dates please see page 5

EYFS – KS2 In-School

Workshop	Yrs	Subject	Page	Code
Investigating the World	EYFS	The World, Technology	10	WI01
Coding & Animation with Scratch Jr	1-2	Computing, English	10	WI02
Computing Unplugged	1-2	Computing	10	WI03
Online Safety: Pupil Voice	5-6	Computing, English	11	WI04
Problem Solving with Scratch	3-6	Computing, Maths	11	WI05

Professional Learning Summary Table

Teaching Assistant Training

		Page	Code
Introduction to Online Safety	Tuesday 18 October 9am - 11.45am	44	TA01
Film-making and iPads	Tuesday 10 January 9am - 11.45am	44	TA02

Full-Day Training and Conferences

Autumn Term

Teach Computing KS1	Thursday 22 September	30	PL1
Teach Computing KS2	Thursday 29 September	31	PL2
English Conference	Tuesday 22 November	34	PL6
Minecraft Across the Curriculum	Thursday 6 October	32	PL3/EPL4
Animation Across the Curriculum	Wednesday 12 October	32	PL4
Certified Online Safety Training	Thursday 3 November	33	PL5/EPL1
Evidence and Assessment	Thursday 12 January	35	PL9
Computing Conference 1	Tuesday 6 December	34	PL7

Spring Term

Film-making Across the Curriculum	Wednesday 11 January	34	PL8
Humanities Conference	Tuesday 28 February	36	PL10

Summer Term

Computing Conference 2	Tuesday 20 June	36	PL11

Half-Day Training and Conferences

Autumn Term

		Page	Code
New to Leadership in Computing Extended CPD 1	Wednesday 21 September	28	EPL3
Languages (MFL) Forum	Wednesday 5 October	37	PLH02
SLT Online Safety Briefing	Thursday 13 October 10 - 11am	38	PLH03
Computing Assessment Extended CPD 1	Thursday 10 November	27	EPL2

Spring Term

New to Leadership in Computing Extended CPD 2	Wednesday 18 January	28	EPL3
Online Safety Briefing for NQTs	Friday 27 January 9 - 11am	38	PLH04
Introduction to Scratch	Thursday 2 February	39	PLH05
Introduction to Kodu	Thursday 2 February 1.15pm - 4.15pm	39	PLH06
Minecraft Extended CPD 2	Thursday 9 February	29	EPL4
Maths Forum – Scratch Maths	Friday 24 February	40	PLH07
Online Safety Extended CPD 2	Friday 10 March	26	EPL1
Computing Assessment Extended CPD 2	Tuesday 21 March	27	EPL2
Science Forum	Tuesday 28 March	41	PLH08

Summer Term

New to Leadership in Computing Extended CPD 3	TBC	28	EPL3
EYFS Forum	Tuesday 23 May	42	PLH10
Online Safety Extended CPD 3	Friday 9 June	26	EPL1
Minecraft Extended CPD 3	Thursday 15 June	29	EPL4
Computing Assessment Extended CPD 3	Thursday 6 July	27	EPL2

Housekeeping

Satisfying school demand

Every effort will be made to ensure that schools are given their first choice. However, on occasion it may be necessary to provide an alternative allocation. This will be done in consultation with SLA coordinators to ensure that the alternative is agreeable and appropriate for the school.

Service standards

The CLC is accredited as an Apple Regional Training Centre and is an official trainer for Purple Mash. Staff at the CLC are qualified CEOP Ambassadors, certified E-Safety Mark Assessors and ThinkUKnow Trainers. The CLC was recently awarded a NAACE (subject association for ICT) Impact Award 2014 - 2015 for the quality of its school support services and was named as Technologists of the Year 2012-2013 by the Association of Learning Technologists. The CLC is a Computing at Schools (CAS) Lead Centre for the teaching of computing and computer science, a local CAS Hub and an LGfL-recognised technical support provider for London schools.

Cancellation

The CLC will endeavour to operate a 'no cancellation' policy. However, unavoidable circumstances such as illness may occasionally require sessions to be cancelled. Where this occurs, the CLC will make alternative provision at the earliest opportunity. The CLC will not cancel CPD provision if numbers are low, although it may offer a more cost-effective alternative or occasionally postpone to increase numbers.

Complaints

If a complaint is made regarding the CLC service, it will be investigated fully, with a response made within five working days. Complaints should be made by email to Julia Lawrence **jlawrence@londonclc.org.uk**

Education Development Trust

As an education charity, Education Development Trust transforms lives around the globe by improving education around the world. We work with national and local governments, schools and other partners or with clusters of schools to effect positive change and our specialist knowledge means we deliver – and design – effective, far-reaching, sustainable education solutions.

Until the end of 2015, Education Development Trust was called CfBT Education Trust. Our new name better represents the breadth of education improvement work we undertake around the world. For nearly 50 years we have provided a range of education services, with a particular interest in school effectiveness, working in over 80 countries.

Our services include:

- Designing and implementing school system reform – from designs for whole education systems to individual improvement programmes for clusters of schools
- Using our world-leading expertise on school inspection and external quality review to develop, manage and deliver inspection programmes and other quality management programmes
- Delivering specialist expertise and recruitment services for English language teaching around the world
- Providing expert careers advice and guidance systems and services to governments and schools
- Supporting school improvement in both private and government schools

Governments such as those in Brunei, England and the UAE choose to work with us because we are able to bring our years of dedicated education knowledge and expertise to complex global problems. We join forces with other organisations to effect change on an even wider scale, always bringing with us our own unique mix of specialist education expertise and project management experience.

For more information on Education Development Trust, please visit the website **educationdevelopmenttrust.com** or email Julia Lawrence **jlawrence@londonclc.org.uk**

Education Development Trust

Education
Development
Trust

0207 720 7514

London Connected Learning Centre

Rectory Grove, London, SW4 0EL

www.londonclc.org.uk info@londonclc.org.uk